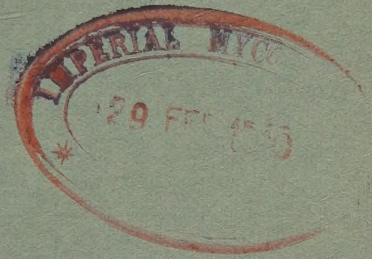


VOLUME XIV
No. 10

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT
FEBRUARY, 1940.



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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

February, 1940

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

FEBRUARY, 1940.

Following the general hold-up of tillage work on account of the severe frosts in January, it is now a case of all hands to the plough, so that a really united effort may be made to overtake what might be termed the "leaway" as well as arrears of stubble land, and that the extra tillage work may be completed before the rush of spring work begins.

While it is gratifying to learn that the area of old grassland scheduled for ploughing-up for the £2 grant is getting within striking distance of the quarter of a million extra acres to be tilled this year, there is little time now left to reach that figure, and farmers are urged not to delay a single day in ploughing all the land which they are required to cultivate under the Compulsory Tillage Order—and as much more as possible—so that this agricultural country may show how really practical its efforts are in serving the national interest. Incidentally, farmers are reminded that the ploughing-up of grassland for the grant must be completed by the 31st March next.

An article dealing generally with the ploughing-up campaign which appears on page 600, includes, among other subjects, some useful notes on seeds for sowing this year. It should be further noted in this connection that information and advice on cultivation appear in the seasonal notes under the various headings.

Statements dealing with the introduction of new orders fixing prices for potatoes and oats are included in the section dealing with marketing schemes and enactments.

19th February, 1940.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st FEBRUARY, 1940.

Good progress was maintained with all classes of field work during the early part of January, when weather conditions were favourable, but following this period, of about 10 days' duration, field work of nearly every description was brought to an abrupt halt by the arrival of severe wintry weather which lasted to the end of the month. Some heavy rains with falling temperatures preceded this general "freeze up" during which slight snow storms occurred. The intervening partial thaws in this period followed by a wet spell towards the end of January brought about a recurrence of flooding in low-lying districts.

The most important work on hands suffered a serious set-back and, although much more land has already been ploughed than in recent past seasons, farmers will have to intensify their efforts to ensure that an additional area of a quarter of a million acres is cultivated this year in accordance with the general tillage plan. The loss of this valuable time will be felt more acutely in the heavy-land districts where ploughing is in a less forward state than on the light soils, and also in the non-tillage districts where stock owners delayed the breaking-up of pastures in order that their herds might benefit from the fairly good amount of "keep" still obtaining as the result of a comparatively mild winter until the arrival of the frosts. Although such jobs as the carting of farm-yard manure and hedge trimming, etc. were engaged in, little field work was possible, and further sowings of winter wheat during the earlier part of January were very few in number. Threshing operations continued steadily during the month, and it is learned that little of this work now remains to be done whilst the scutching of flax was also undertaken in some areas. With the ground in a frozen state farmers experienced difficulty in removing turnips from the fields for feeding to stock, and potatoes from pits, but, as a general rule, little damage was reported to have been done to either crop.

The heavy frosts, following the grazing of the pastures by large numbers of animals, have rendered most fields bare of grass. Little opportunity was available for making applications of phosphatic manures to grass lands, and rather less has been applied than at this time in recent years. Supplies of phosphates were stated to be adequate for the demand throughout the month, except in the case of basic slag. It was also learned that whilst many farmers have purchased artificials for crops in good time, a considerable number were

still without supplies, either owing to a shortage of storage space or a lack of ready money. In the latter connection it seems that the credit facilities afforded by the Ministry's loan schemes have been overlooked.

The most serious difficulties brought about by the weather confronted the stock owner who had already his hands full following the curtailment of imported feeding stuffs by the conditions imposed by the war. As previously indicated, the comparative mildness of the winter season up to the arrival of frosts permitted the grazing of cattle and sheep on a larger scale than usual, and the sudden termination of this source of sustenance for livestock meant that much larger stocks of hay, roots and concentrates had to be fed. All classes of stock were, however, maintained in good health, but many out-lying store cattle and mountain ewes suffered a loss in condition from the severe weather.

A feature of the livestock industry was the introduction of meat control on the 15th. Prior to that date trade displayed a hesitant tendency, but prices firmed in anticipation of control which was brought in with the minimum amount of disturbance to the industry. Thereafter trade in the open market was quietly steady for good store animals, and prices maintained a firm trend.

THE CROPS.

WHEAT.—Further sowings of winter wheat were limited on account of the severe weather conditions prevailing last month, but reports from all districts indicate that the area under this crop is substantially greater than usual. Frost-bound conditions checked growth, but the braids of early sown crops are looking well.

The threshing of last year's crop was almost completed last month. The wheat had kept well in the stack, and the grain and straw were satisfactory both in respect of yield and quality. As most farmers who have stores of wheat were retaining it for their own use, only a comparatively few sales were reported, and prices usually ranged from 13/- to 14/- per cwt.

OATS.—Threshing operations continued with satisfactory results. Although the inclement weather checked progress with the work to some extent, farmers generally made the most of their opportunities, and the greater part of the crop has now been threshed. On some farms, however, threshing is being postponed and a reserve of food and seed being kept in the sheaf.

Crushed oats continued to be fed in fairly large quantities to stock, but the majority of farmers were using the grain with due economy, having regard to the necessity for conserving seed supplies. It is learned that in most tillage districts farmers will have sufficient seed oats for their requirements, but the

needs of those who had discontinued tillage farming will mean a considerable increase in the quantity of seed required, they are asked to place orders at once with other farmers or with merchants for seed oats.

By orders recently made by the Minister of Food maximum prices have been fixed for feeding and milling oats in Northern Ireland, details of which are given on page 611, while the Ministry of Agriculture has made an Order fixing the maximum prices for seed oats (see pages 603 and 612).

Prices for white oats sold at Northern Ireland market centres during January moved rather irregularly, but on balance were cheaper. The average price of 14/2½d. per cwt. was 1/- lower than the previous month's figure.

The average price for oat straw, however, hardened appreciably, and the monthly figure of 78/4d. per ton was 15/1d. above the December quotation.

BARLEY.—Threshings were almost completed by the end of January, but little of the grain was marketed as farmers were using supplies for replacing imported maize in the pig ration, and most of the home-grown barley has either been ground for this purpose, or was being retained for use as seed. In view of the need for growing more of this crop for stock feeding, and the Ministry's efforts to have the area under barley increased from 3,500 acres to 50,000 acres, the demand for seed will be very considerable, and farmers are urged to make immediate arrangements with their merchants or seedsmen for supplies.

FLAX.—It was reported that scutch mills were busily engaged during last month, and that the bulk of the flax has now been scutched. On the whole the yield and quality of the flax appear to compare very favourably with last year's.

Flax continued to be purchased at controlled prices last month, and the bulk of the fibre was placed in the second, third and fourth grades. The following weekly average prices of flax per stone, weighted on quantities purchased in Northern Ireland by the Ministry of Supply (Flax Control) at fixed rates varying from 10/- to 16/6d. according to grades, are compared with the prices obtained in the open market a year ago.

1940			1939		
Week ended	s.	d.	Week ended	s.	d.
6th January ...	14	1½	7th January ...	9	7½
13th " ...	13	10½	14th " ...	10	0½
20th " ...	13	9½	21st " ...	10	5
27th " ...	13	6	28th " ...	10	6¾
3rd February	13	6	4th February	10	6¼

The prices of from 17/6d. to 22/6d. per stone which have been announced for the 1940 crop, are generally welcomed, and many farmers who did not

intend to grow the crop have now decided to do so in view of the prices offered. A considerable increase in acreage is expected, and some enquiries about seed have already been received. Farmers are urged to place orders for seed without delay, so that the merchants may know how much they will require to fill the orders. The Ministry hopes that at least 50,000 acres of flax will be grown this year in Northern Ireland.

HAY.—The severe weather during January caused a heavy drain on stocks of home-grown fodder, and the quantities of both upland and meadow hay now remaining on most farms have been reduced to slightly below average dimensions for the time of year. It is not anticipated, however, that there will be any serious shortage of hay if farmers continue to exercise due economy in its use. The bulk of the hay on hands is of a good standard of quality.

Supplies of both upland and meadow hay offered at markets last month were in keen demand, and prices were further advanced. Upland hay averaged 109/2d., an increase of 3/1d. per ton on the month, while meadow, at 84/9d. per ton, was 3/3d. dearer.

Grass seed prices also continued to harden, and Italian rye-grass seed, at the high average price of 57/0½d. per cwt., was 6/8¾d. dearer, while the price of Perennial seed at 29/10½d. was 5/8¾d. above the December quotation. A few lots of crested dogstail seed averaged 62/5d. per cwt.

MANGELS.—The roots were generally well stored and, consequently, they suffered little damage from the frosts. On some farms they are being fed to cattle to a fair extent, but as a rule they are being held in reserve and will be very useful when supplies of turnips are exhausted.

TURNIPS.—The heavy frosts did much damage to roots still in the fields, but those properly stored in clamps were not much affected. Apart from damage by frost and slight losses caused by "raan" disease, the crop is in a normally sound condition, and the stocks of sound roots on most farms are up to average. The roots are now being fed fairly liberally to stock, particularly dairy cattle, in an effort to supplement the decreased rations of concentrates.

POTATOES.—Despite the recent severe frosts the tubers are generally in good condition in pits and stores. Some losses have occurred particularly among potatoes in sprouting boxes, and in pits that had been damaged by rats, or which had been insufficiently covered. Little damage from blight has been reported, but there has been some rotting in the pits in the case of first and second earlies.

Large quantities of potatoes were fed to livestock last month, but the stocks remaining on most farms are of fully normal dimensions for the season, as very heavy yields were obtained last year.

The demand for potatoes was quiet last month, but with the frosty weather and the reduced supplies towards the end of the month, prices had a firmer tendency. The monthly average price for main-crop potatoes marketed in Northern Ireland for local consumption was $4\frac{3}{4}$ d. higher on the month at $4/7$ d. per cwt. The principal variety, Arran Victory, was $\frac{1}{2}$ d. firmer at $4/8$ d., while Kerr's Pink at $4/7\frac{1}{2}$ d. per cwt. was $6\frac{1}{2}$ d. dearer.

Export prices during the week ended 3rd February, 1940, were firmer on the week, and ranged as follows:—

Variety		Bagged	Loose
WARE	Arran Victory	£3 10 0 to £4 10 0	£3 10 0 to £3 15 0
	Arran Banner	£3 15 0 to £4 0 0	£3 10 0
	Arran Consul	£4 0 0 to £4 10 0	
	Kerr's Pink	£4 0 0 to £4 10 0	£3 10 0 to £3 15 0
	Gladstone	£4 5 0	£3 15 0
SEED	Arran Pilot	£5 10 0	
	Arran Banner	£3 10 0 to £4 0 0	
	Arran Peak	£4 0 0	
	Up-to-Date	£4 0 0	
	Great Scot	£5 0 0	
	Majestic	£3 15 0 to £4 0 0	

There appears to be no shortage of seed potatoes in Northern Ireland, but farmers are again urged to make certain of getting supplies of healthy seed by placing orders now.

CABBAGE AND KALE.—In most instances these crops have been used up for feeding to dairy cattle, but in some cases small areas are being reserved for feeding to sheep in the spring.

OTHER VEGETABLES.—During the month of January, home-grown produce marketed for local consumption, sold at higher prices. Savoy's ranged in price from 10d. to $1/7$ d., and were $\frac{1}{4}$ d. dearer on the month at $1/3\frac{1}{2}$ d. per dozen; cabbage fetched from 1/- to $1/7$ d., and averaged $1/4$ d. per dozen, an increase of $\frac{3}{4}$ d. over the month; whilst cauliflowers, marketed in Belfast, were 1/- dearer on the month at 3/- per dozen. Leeks sold at from 5d. to $1/8$ d., and were $4\frac{1}{2}$ d. above the December prices at 10d. per bunch, and parsley made from 3d. to $1/6$ d., and was $5\frac{1}{4}$ d. dearer at $8\frac{3}{4}$ d. per bunch. Carrots ranged in price from $7/6$ d. to 16/-, and averaged $10/2\frac{3}{4}$ d. per cwt., or $1/5\frac{1}{4}$ d. more than a month ago, and parsnips were 11d. dearer at $7/2\frac{1}{4}$ d. per cwt.; while turnips sold at firmer rates of from 1/- to 2/- per cwt.

FRUIT.

APPLES.—Home-grown apples at Belfast markets remained plentiful during January, but trade continued dull at low prices. The principal culinary variety, Bramley's Seedling, made from 6/- to 10/- per ten stone barrel for good quality fruit, whilst lower grade produce was available at from 3/- to 4/-.

Produce other than home-grown was available at the following rates:—Canadian apples, 13/- to 16/6d. per box of 40 lb., and 36/- to 40/- per nine stone barrel; Cape plums, 6/- per tray of 12 lb.; French lettuce, 10/- to 12/- per crate of 2 dozen; Canary Island tomatoes, 10/- to 15/- per boat of 22-24 lb.; sea kale, 3/- per punnet (1 lb. approximately); forced rhubarb 2/4d. per dozen bunches; garlic, 12/- per stone. First supplies of new season's potatoes from Cyprus fetched from 16/- to 16/6d. per box of 70 lb.

LIVE STOCK.

CATTLE.—Store cattle were maintained in good health during January, but there was a general loss of flesh and condition as a result of the effects of the severe weather. On some farms, however, hay and concentrates were available in sufficient quantities to enable stores to be kept in fairly good condition.

Supplies of store cattle at fairs and markets last month were of barely moderate quality. Only strong forward animals and good types of heifers for stock purposes sold readily, but prices all over were firm in sympathy with the general trend of beef prices before the introduction of the meat control.

The numbers of cattle being stall-fed have declined following the curtailment of supplies of imported feeding stuffs.

The Livestock and Meat Control Scheme came into operation on the 15th January, 1940, and from that date the Ministry, acting on behalf of the Ministry of Food, has purchased all fat cattle at the prices set out on page 606 of this Report. The Scheme is working smoothly, and farmers are generally well satisfied with the prices obtained. Prior to the introduction of control fat cattle were in keen request at rising prices.

The calving and health of dairy cattle remained satisfactory last month, although a few cases of abortion were reported. The inclement weather and the limited supplies of feeding stuffs available were, however, reflected in the condition of the animals, and their milk yields declined to below normal dimensions for the season.

Good types of dairy cattle were in fairly keen request throughout last month, but inferior animals were difficult to cash, and towards the close of the month prices had a noticeably easier tendency.

There is, as yet, little indication of any considerable change in the numbers of dairy cattle. Most dairy farmers have been able to maintain their herds at full strength, and there are good numbers of young in-calf heifers in the country.

SHEEP.—The health of the flocks was generally good during January, but there were isolated cases of braxy and sheep scab. Some hand-feeding was done during the frost, but the general condition of the animals is not as good as usual on account of the very severe weather. So far the lambing results give promise of a satisfactory crop this year.

Fat sheep and lambs were in brisk demand, and price movements favoured sellers until the introduction of Control on the 15th of the month, after which date all fat sheep were bought on behalf of the Ministry of Food at the fixed rates. An increase of 1d. per lb. estimated dressed carcase weight was announced on the 29th January. (See page 607).

HORSES.—Both the supply of and the demand for farm horses varied a good deal throughout the country, and prices, while generally firm, fluctuated a good deal. Young working horses ranged in price from £20 up to £65 per head according to quality, while older animals realised up to £33 per head. Foals fetched from £8 up to £30, according to type, and unbroken colts made from £16 to £36 per head.

PIGS.—Trade in young pigs showed some slight improvement last month, but the demand remained dull and prices were generally unchanged to easier. Farmers continued to reduce their numbers of brood sows, but in most cases the best breeding animals were being retained.

Supplies of pork were readily bought up at the fixed prices shown on page 607. Pigs were generally marketed at the lighter weights on account of the feeding stuffs position.

POULTRY.—Supplies of poultry at markets last month returned to normal dimensions, following the holiday season, and chickens cheapened by $2\frac{1}{2}$ d. to $2\frac{7}{8}$ d. each, hens by $4\frac{1}{4}$ d. to $1\frac{1}{8}$ d. each, and ducks by $3\frac{1}{2}$ d. to $2\frac{3}{4}$ d. each. In general, the prices per lb. live weight paid by wholesale merchants showed little change on the month, and ranged as follows:—Chickens, large $8\frac{1}{2}$ d. to 10d., medium 7d. to 9d., small 7d. to 8d, hens $4\frac{1}{2}$ d. to 6d., and ducks 5d. to 6d.

DAIRY PRODUCE.

MILK.—The inclement weather conditions and the shortage of imported concentrates combined to depress the milk yields and supplies to the creameries were, consequently, below normal. The prices paid to producers for milk delivered to the creameries during last month were further advanced, and ranged from 5d. to 8d. per gallon, the separated milk being returned to the farmer.

As the average price paid for milk produced in Northern Ireland and delivered to creameries for manufacturing purposes for the month of December, 1939, exceeded the standard price provided for by the Milk and Milk Products Acts (Northern Ireland), 1934 to 1938, no equalisation payments were made in respect of that month.

FARM BUTTER.—Supplies of farmers' print butter offered at markets in Northern Ireland during January sold at slightly firmer rates, the weighted average price being $\frac{1}{4}$ d. dearer at $1\frac{5}{8}$ d. per lb., whilst that for lump butter was unchanged at $\frac{1}{4}$ d. per lb. The general price ranges for farmers' butter was from $1\frac{1}{10}$ d. to $1\frac{7}{10}$ d. per lb.

EGGS.—Producers' prices, as fixed weekly by the Ministry of Agriculture, for hen and duck eggs recorded an advance during the latter half of January. A table of egg prices showing the prices ruling during the five weeks ended 3rd February, 1940, together with comparative figures for 1939, appears on page 610 of this Report.

The attention of egg producers is directed to the announcement on Standard Prices printed on page 611.

THE PLOUGHING-UP CAMPAIGN.

TIME MARCHES ON—ANOTHER MILESTONE PASSED.

Although the severe wintry weather experienced in January held up ploughing, with the result that much valuable time was lost for getting on with the job of putting an extra quarter of a million acres under crop this year, it has not deterred farmers from their purpose of playing their full part in the campaign on the home front to make the country less dependent on imported foods during war-time. The steady flow of applications for the ploughing grant of £2 an acre received during that month, and since, continues to show the earnest of their good intentions in this direction. Whilst, however, it is appreciated that much of the ploughing has been done—indeed a tour of the country now would seem to indicate that the season was more advanced judging by normal standards—there is yet a very substantial area to be ploughed before the objective has been reached. The recent general setback, therefore, should serve as a reminder to those farmers who are inclined to hold back until the last moment, that although the daylight hours are getting longer the vagaries of the weather during the early months of the year are such as to make even the most optimistic prepare for the worst by making the most of the early opportunities for outdoor work. To those, therefore, who have not yet completed their ploughing a last minute plea is now made that they do so without a day's further unnecessary delay. In this connection it is pointed out to those farmers who are ploughing up old grassland for the grant that the last day on which the work must be completed is the 31st March next.

Apart from the considerations already mentioned, farmers will have realised by now what they will be up against next winter if they do not at least look after their own interests in the way of growing more food crops, but he would be indeed a very short-sighted individual who was content to confine his activities to his own requirements. As has already been stated, this war is unlike any previous wars in which this country has been engaged. The ruthless enemy we are fighting against has no scruples about the rights of non-combatant civilians, and even neutrals for that matter, and he is repeating his tactics of 1914-18, even more mercilessly in attacking unprotected shipping in the vain hope of reducing this country to a state of impotence through a shortage of essential foodstuffs and materials. Our armed forces are adequately coping with this menace, but the farmer operating on the home front must play his full part in utilising the nation's natural resources for growing as much food as is possible to reduce the need for imports to the minimum,

and thereby release a greater number of ships for the war effort. The production of food crops and flax on a larger scale than ever before is essential for the needs of the nation at this time, and whilst no one doubts that farmers will respond wholeheartedly to the call of duty, it is stressed that the readiness of the response will go a long way to bring victory nearer.

THE PLOUGHING GRANT.

As anticipated, there has been a considerable increase in the number of applications for the grant within the past two months, and the 200,000 acre mark has now been reached. There is, however, still a little time left for farmers to apply, but it is urged that they will do so without a day's further delay as the ploughing of all grassland for the grant must be completed by 31st March next. Already some 3,500 applications have been dealt with, and payments amounting to £40,000 have been made. In connection with the settlement of the claims, it is again stressed that the Ministry cannot take any action until it has been notified that the ploughing has been completed.

As some doubt still exists as to the relationship of the ploughing grant to the compulsory tillage Order it is again pointed out that none exists, but that all old pasture land, seven years or more under grass, which is ploughed up to comply with the requirements of the compulsory tillage Order is eligible for the £2 grant.

Farmers who have not yet applied for the £2 per acre grant in respect of old grassland to be ploughed, should do so at once. Application forms can be had on request from the Ministry, from the County Executive Officer, or from the local Tillage Officer. The addresses of these officers were given in last month's report. Farmers should not wait for an officer to call, or wait for application forms to be sent to them. It is to their interests to get the forms completed and sent to the Ministry immediately, as ploughing must be done by 31st March next.

THE COMPULSORY TILLAGE ORDER.

The compulsory Tillage Order prescribes a minimum area which must be under crops on every farm or holding which has 10 acres or more of arable land. Where no crops were grown in 1939 that area is one-fifth of the total arable land on the holding, and when crops were grown in 1939 the minimum additional area to be tilled in 1940 is one-tenth of the arable land on the holding subject to the condition that at least one-fifth of the total arable land shall be in crops. These are the legal obligations of farmers under the Order, and it is well to realise that very severe penalties are prescribed in the Defence of the Realm Regulations for breaches of the Order.

As the ploughing season is now well advanced, those farmers who have not yet commenced to plough the requisite proportions of their holdings are advised to start work without further delay. It should be realised that there will be no relaxation of the Tillage Order, and that any occupier who fails to plough and crop for harvesting this year the necessary area of land on his holding will render himself liable to prosecution and to the penalties provided under the Defence Regulations. Even if a farmer has not been visited by a Tillage Officer this fact will not be accepted as an excuse for failure to comply with the provisions of the Order.

The loud-speaker van which is touring Northern Ireland at present is intended to be a means not only of bringing home to farmers their legal obligations in regard to the tillage of their holdings, but to assist them with advice on the many problems that arise in connection with their farming operations. The van will visit the list of centres published on page 637, and farmers are strongly advised to make as much use as possible of the opportunity provided for discussing their difficulties with the Ministry's officers who will be in attendance.

As already stated, the Tillage Order and the £2 per acre grant for the ploughing of old grassland are entirely distinct. If the area of the land ploughed for the £2 grant is not sufficient to comply with the minimum obligation under the Tillage Order as specified above, more land must be ploughed and this land can either be grassland which is seven or more years in grass, and, therefore, eligible for the grant, or rotation grassland which is not eligible for the grant. The important point to note is that the minimum proportion of the arable land specified must be under crops.

TRACTORS AND MACHINERY.

The suspension of ploughing during the bad weather in January will necessitate the fullest use of all available tractors if the work is to be completed before seed time. Fortunately, the sale of tractors has continued steadily during January, and if delivery were obtained of all the tractors now on order there would be only a limited number of districts in which difficulties may arise. Special attention is being given to these districts. There are now fully 1,100 tractors available for agricultural use.

Action has been taken with the object of obtaining information as to the probable demand for disc harrows and binders for use along with tractors, in order to ensure that, as far as possible, a sufficient number shall be available when required. Farmers are again reminded that orders should be placed now for all implements and machines required for spring cultivation and for harvesting this year's crops.

On the 10th January the Ministry arranged a demonstration of tractor ploughing at Stormont, at which the leading makes of machines were seen in operation. At the time of the demonstration a film dealing with the need for tractor ploughing, and comparing the old and new methods, was made. This short film, under the title, "Plough for Victory" is now being shown in cinemas and halls throughout the province, and should be seen by all interested in tractor operation.

NOTES ON SEEDS FOR 1940 SOWING.

Normal rotations will be disturbed this year by the largely increased area under tillage, and by the necessity to concentrate upon special crops. Big increases are anticipated (and required) in barley, flax, potatoes, wheat and oats. There are, however, other crops to which particular attention should be paid, such as marrow-stemmed kale, Italian ryegrass and beans.

MARROW-STEMMED KALE provides a great weight of edible produce containing more dry matter than other "root" crops, and is particularly valuable for dairy cows.

ITALIAN RYEGRASS is the most productive in winter of all grass crops, and highly profitable at present when grown for seed. In normal times some thousands of tons of seed have to be imported annually by sea, and such imports cannot now be counted upon. A largely increased area should be sown in 1940.

BEANS are the best home-grown nitrogenous (protein) feeding stuff. The cereals are carbohydrate foods and must be balanced by a suitable protein food. It must be noted, however, that to produce a crop of ripe pods, beans must be sown early in a favourable position.

SEED SUPPLIES.

OATS.—There is a plentiful supply of seed oats in the United Kingdom, and it is essential that threshing and distribution be completed immediately. Prices will not change further for this season since the Home Grown Oats (Control and Maximum Prices) Order, 1940, with special amendments applying to Northern Ireland, came into operation on the 1st February.

MAXIMUM PRICES ORDERS.—The effect of the Order and the Northern Ireland amending Order is, briefly, to control prices of oats grown in the United Kingdom of Great Britain and Northern Ireland when bought or sold for

milling or feeding, and in addition of oats grown in Northern Ireland when bought or sold as seed for sowing. (Prices of certified pedigree oats grown in Northern Ireland, and of oats grown elsewhere in the United Kingdom, when sold as seed, are not controlled). The following conditions, unless modified by a special licence from the Ministry, govern Northern Ireland grown oats when sold as seed:—

(a) Farmers may only sell the seed oats they have grown to an approved buyer (i.e., an oatmeal miller, or a merchant authorized to issue wheat certificates under the Wheat Acts, or a firm or person licensed as an approved buyer by the Ministry of Agriculture). The net cash price (exclusive of bags and carriage) must not exceed 16/- per cwt.

(b) Approved buyers cannot sell oats for seed except to another approved buyer or to a grower who purchases them for sowing. The net cash price (exclusive of bags and carriage) must not exceed 17/- per cwt.

(c) When a farmer orders oats for sowing from an approved buyer he must sign a declaration, on a form which will be given him by the merchant, that the oats will only be used for seed, and showing the place and area of the ground he proposes to sow with them. The merchant may not deliver the seed oats until he has received this declaration.

Farmers in doubt about matters relating to these Orders should write to the Seed Supplies Officer, Ministry of Agriculture, Elmwood Avenue, Belfast.

BARLEY.—Northern Ireland has of recent years grown very little barley. Steps have, therefore, been taken to secure a supply of seed from Great Britain so as to increase the supply of home-grown feeding stuffs for live stock, and it is hoped that farmers will sow at least 50,000 acres.

WHEAT.—Except in special circumstances, the sowing of spring wheat in Northern Ireland is not recommended. It would be preferable, in most instances, to sow either barley or oats.

FLAX.—Supplies of seed have now been procured to sow over 50,000 acres, and a small proportion of the seed is home-saved seed of pure strains. Generally speaking, the seed will be of excellent germination. Owing to war conditions the supply of seed of blue-flowering pure strains is very limited, and this year farmers will have to depend to a much greater extent than in former years on seed of the white flowering variety (Concurrent). The prices at which the seed would be sold to farmers will range from about 45/- per cwt. for ordinary varieties of seed up to 70/- per cwt., for blue-flowering pure strains.

ITALIAN RYEGRASS.—Members of the Wholesale Grass Seed Trade have promised to reserve a sufficient supply of fine Italian to provide seed for Northern Ireland growers. This supply cannot, however, be held back indefinitely, and growers are, therefore, strongly urged to place immediately their orders for Italian which they intend to sow for seed saving.

MARROW-STEMMED KALE and BEANS.—There is a good supply of marrow-stemmed kale seed, though that of thousand-headed kale and of rape is rather short. There may be some shortage of supplies of field bean seed. Orders for both these should, therefore, be placed at once.

POTATOES.—The prices of the principal varieties are included in the statement on page 612.

PRICES OF FERTILISERS.

A statement giving current prices of the principal phosphatic and compound fertilisers appears on page 643.

THE PURCHASE OF LIME UNDER THE LAND FERTILITY SCHEME.

Farmers who intend to apply lime to land should read the statement on page 614.

LOANS FOR THE PURCHASE OF SEEDS AND FERTILISERS.

Loans under the terms of the Agricultural Loans Scheme are available to bona-fide farmers for the purchase of seeds and artificial fertilisers. Applications should be made on the prescribed form of application, which may be obtained on request to The Secretary, Ministry of Agriculture, Stormont.

Loans for this purpose, if granted on or before the 30th June in any year, will be repayable by two equal instalments of principal, together with interest on the outstanding balance on the 31st December in that year, and the 31st December of the following year respectively, and if granted on or after 1st July in any year will be repayable in full on 31st December of the following year.

MARKETING SCHEMES AND ENACTMENTS.

THE LIVESTOCK AND MEAT CONTROL SCHEME. FIXED PRICES.

The Ministry, acting as agents for the Ministry of Food, purchased all fat cattle and sheep at the appointed centres on and after the 15th January, 1940, in accordance with the arrangements already notified.

FAT CATTLE.

The following are the prices payable for the various grades during the period 26th February to 10th March, with the prices for the period 15th January to 25th February shown in brackets.

	Steers and Heifers (Home Bred)		Fat Cows		Fat Bulls	
	Killing out percentage	Per live cwt.	Killing out percentage	Per live cwt.	Killing out percentage	Per live cwt.
Special	60 and over	65/- (64/6)	—	—	—	—
A	58 to 60	62/- (61/6)	55 and over	38/6 (38/-)	58 and over	40/6 (40/-)
	57	60/6 (60/-)	54	36/6 (36/-)	57	39/6 (39/-)
	56	59/- (58/6)	53	34/6 (34/-)	56	38/6 (38/-)
B	55	56/6 (56/-)	52	32/- (31/6)	55	37/- (36/6)
	54	55/- (54/6)	51	30/- (29/6)	54	36/- (35/6)
	53	53/6 (53/-)	50	28/- (27/6)	53	35/- (34/6)
C	52	47/- (46/6)	49	25/6 (25/-)	52	31/6 (31/-)
	51	44/6 (44/-)	48	23/6 (23/-)	51	28/6 (28/-)
	50	42/- (41/6)	47	21/6 (21/-)	50	25/6 (25/-)

(The prices applicable for the period commencing 26th February are 6d. per live cwt. higher than those previously obtaining and further increases will take place on 11th March and at fortnightly intervals until 17th June, 1940.)

CALVES.

(1) Veal Calves :

First quality 13d. per lb. estimated dressed carcase weight.

Second quality 11d. per lb. " " "

Third quality 7d. per lb. " " "

Calves which are neither genuine veal calves nor "bobbies" but are fit for the retail meat trade will be classed as third quality.

(2) Bobbies and Boners.

These calves are suitable only for manufacture.

Large ...	...	...	...	25/- per head.
Medium ...	...	...	...	20/- "
Small ...	...	...	...	15/- "

FAT SHEEP.

A price increase of 1d. per lb. came into operation on 29th January and fat sheep and lambs were purchased by the Ministry at the following prices per lb. dressed carcase weight. The prices previously obtaining are shown in brackets except where no alteration has taken place.

(1) **Fat Sheep**—The price to be paid for fat sheep is on the basis of an annual average price of 12d.: the price now in operation is 13d. (12d.). (2) **Fat Lambs**—14½d. (13½d.). (3) **Sucking Lambs**—17d. (4) **Ewes**—Fat light-weight ewes 9d. (8d.), other fat ewer 8d. (7d.), lean ewes 4d. (5) **Rams**—Fat rams 8d. (7d.), lean rams 3d. (6) **Rejects** (all classes)—3d.

(On 22nd April the price per lb. will fall ½d., and on 6th May a further reduction of ¼d. per lb. will be made).

FAT PIGS.

The machinery previously operated by the Pigs Marketing Board for the purchase of live pigs at the collecting centres was taken over by the Ministry on 15th January. The sale of dead pigs direct from producers to curers continued in force. Prices are given below.

(1) Pigs sold alive (other than pigs specified in (3) below).

Weighing 100 lbs. to 160 lbs. live weight	...	67/6 per live cwt.
" 112 lbs. to 180 lbs. dead weight	...	103/7 per dead cwt.
" 181 lbs. to 200 lbs.	...	100/10 "
" 201 lbs. to 220 lbs.	...	98/- "
" 221 lbs. to 240 lbs.	...	92/5 "
" Over 240 lbs.	...	89/7 . "

(2) Pigs sold dead (other than pigs specified in (3) below).

Weighing 112 lbs. to 180 lbs. dead weight	...	99/- "
" 181 lbs. to 200 lbs.	...	96/6 "
" 201 lbs. to 220 lbs.	...	94/- "
" 221 lbs. to 240 lbs.	...	88/6 "
" Over 240 lbs.	...	85/6 "

(3) (a) Rigs (sold alive)	...	...	92/5 "
Rigs (sold dead)	...	...	88/6 "
(b) Stags (sold alive)	...	...	36/6 per live cwt.
Boars do.	...	...	36/6 "
Sows do.	...	...	51/- "

(On and after 12th February, Stags and Boars intended for slaughter for human consumption must be sold alive. The prices payable are shown above. Prior to that date the prices per dead cwt. were: **Stags** (sold alive), 70/-; **Stags** (sold dead), 66/-; **Boars** (sold alive), 50/5; **Boars** (sold dead), 46/6).

These prices will be subject to the following deductions in respect of insurance:

Live pigs 6d. per pig; dead pigs 4d. per pig; sows 2/- per pig.

All pigs and pig carcases sold will also be subject to a deduction of 8d. per pig in respect of the administrative levy of the Pigs Marketing Board.

ADDITIONAL PURCHASING DAYS.

Additional purchasing days for cattle and sheep have been arranged for the undernoted centres. These centres will have two days per month each, starting from the 12th February, 1940 :—

Money more	...	...	2nd Monday and 4th Monday.
Markethill	...	...	1st Tuesday and 3rd Friday.
Armagh	...	...	1st Thursday and 3rd Tuesday.
Poyntzpass	...	...	1st Saturday and 2nd Tuesday.
Lurgan	...	...	2nd Thursday and 4th Thursday.
Banbridge	...	...	2nd Friday and last Monday.
Kircubbin	...	...	1st Monday and 3rd Monday.
Dungannon	...	...	1st Thursday and 3rd Thursday.

Producers are urged to avail themselves of the additional days and so help in avoiding congestion and delay.

FATSTOCK SALES IN BELFAST.

Farmers and others are requested to note the following points in connection with the purchase of cattle and sheep by the Ministry's Purchasing officers :—

1. For the Tuesdays' sales in Belfast.

(a) All cattle should be sent either to

Messrs. R. J. Allam, Ltd., Oxford Mart, Oxford St., Belfast,

or Messrs. John Colgan & Sons, Oxford Street, Belfast.

(b) All sheep should be sent to

Messrs. John Robson, Ltd., Stewart Street, Belfast.

2. At all purchasing centres, cattle will be dealt with first, commencing at 8 a.m. and sheep later, commencing at about 10 a.m.

3. Persons sending cattle or sheep to any purchasing centre must have someone at the centre to take delivery. The Ministry will not be responsible for any animal until it has been purchased.

NOTICE OF INTENTION TO OFFER FATSTOCK.

As has been announced, producers must give to the Ministry notice in writing of their intention to offer fat cattle or sheep for purchase at a purchasing centre.

Such notice must be sent so as to reach the Ministry at least twelve days prior to the beginning of the week in which it is desired to offer the animals for purchase.

Forms of notice may be procured from any R.U.C. Barracks, and must be fully completed.

BUTTER (MAXIMUM PRICES) ORDER, 1940.

The above Order provided that all wrappers and packages in which butter is sold after February 1st, 1940, must bear the words "National Butter", and that no wrapper in which national butter is sold on and after the 31st day of March, 1940, should bear any words descriptive of such butter other than the words "National Butter" except under and in accordance with the terms of a licence granted by the Minister of Food.

Sections 6 and 7 of the Order were amended in an Order dated January 30th to read as follows:—

"6. A person selling by retail any National Butter or any butter blended with National Butter shall, if at the time of retail sale such butter is in bulk (that is to say is not wrapped or packed), place on or in close proximity to any such butter which is exposed for sale a notice bearing the words "National Butter", in letters not less than one half of an inch in height, and such notice shall not bear any words or letters indicative or descriptive of the quality or place or origin of such butter other than the words "National Butter".

7. A person selling by retail on and after the 1st day of May, 1940, any National Butter or any butter blended with National Butter shall not sell or offer or expose for sale any such butter in any wrapper unless such wrapper is clearly and conspicuously marked with the words "National Butter", in letters not less than one quarter of an inch in height, and no wrapper in which any such butter is sold or offered or exposed for sale shall bear any words or letters indicative or descriptive of the quality or place of origin of such butter other than the words "National Butter" or bear any letters larger than the letters of the words "National Butter"; provided that this Article shall not apply to the sale in a plain wrapper of such butter which is in the presence of the buyer taken from bulk."

In short, up to 30th April it will be legal for butter to be sold in packages bearing not only the words "National Butter" but also other words descriptive of the quality or place of origin of the butter. On and after May 1st, however, wrappers must bear the words "National Butter", and such a description only, and the Ministry is not as under the original Order empowered to issue licences permitting traders after that date to use wrappers on which "National Butter" has been superimposed over some other description. It should be understood, however, that this Order does not preclude the printing of creamery code numbers on wrappers.

AGRICULTURAL MARKETING ACT (N.I.), 1933.

REVOCATION OF BUTTER AND CREAM MARKETING SCHEME.

The Ministry of Agriculture for Northern Ireland, after such consultation as is required by sub-section (4) of Section one of the Agricultural Marketing Act (Northern Ireland), 1933, and by virtue and in exercise of the powers conferred on it by the said sub-section, has made an Order revoking the Butter and Cream Marketing Scheme (Northern Ireland), 1936.

The Order provides that the payment of contributions by registered producers in respect of butter or cream sold by them shall be revoked as from the 12th February, 1940; and that the remaining provisions of the Scheme shall be revoked as from the 31st March, 1940.

The Order is entitled the Butter and Cream Marketing Scheme (Northern Ireland) (Revocation) Order, 1940. Copies of the Order may be obtained from His Majesty's Stationery Office, 80, Chichester Street, Belfast, or through any bookseller.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

NORTHERN IRELAND EGG PRICES (PRODUCERS).

The following table shows the prices fixed by the Ministry, and payable by licensed wholesale dealers, for eggs purchased from producers during the weeks specified, as compared with the prices fixed for the corresponding weeks of 1939.

			1940				1939			
			Hen eggs per lb.*		Duck eggs per doz.*		Hen eggs per lb.		Duck eggs per doz.	
			s.	d.	s.	d.	s.	d.	s.	d.
January	6th	...	1	2	1	7	1	0	1	6
"	13th	...	1	1½	1	7	0	11½	1	6
"	20th	...	1	3½	1	9	0	10½	1	5
"	27th	...	1	3½	1	9	0	10	1	5
February	3rd	...	1	4½	1	9	0	8	1	4

*Where hen eggs are delivered by the producer to the packing store of a licensed Wholesale dealer of Class A an additional ½d. per lb. is payable; in the case of duck eggs an additional ¾d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938.

The following were the standard deductions :—

Hen Eggs : Seconds and soiled eggs, ½d. per egg; Rejects, 1½d. per egg during the weeks ended 6th and 13th January, afterwards 2d. per egg.

Duck Eggs : Rejects, 1½d. per egg during the first two weeks of January, afterwards 1¾d. per egg.

STANDARD PRICES.

The Ministry, acting on the advice of the Egg Marketing Committee for Northern Ireland, has decided to make a change in the method by which Standard prices for eggs are determined. Since the Scheme came into operation in October, 1937, the Standard price published each week has been the price payable by wholesale dealers to producers for eggs for supplies collected at the farm. Producers who delivered their supplies to the packing store of a licensed wholesale dealer of Class A, or to an approved depot, were entitled to receive for hen eggs $\frac{1}{2}$ d. per lb. and for duck eggs $\frac{3}{4}$ d. per dozen in addition to the Standard price.

From the 4th March, 1940, however, the Standard price published by the Ministry will be the price payable only in respect of supplies of eggs delivered to the packing store of a licensed wholesale dealer of Class A or an approved depot. The price payable to producers in respect of eggs collected at the farm or delivered to any premises other than those stated above, will be $\frac{1}{2}$ d. per lb. for hen eggs, and $\frac{3}{4}$ d. per dozen for duck eggs lower than the Standard price.

The Ministry would like to assure poultry keepers, however, that the principle now adopted by the Egg Marketing Committee does not mean that they will get a lower price for eggs. Briefly, it is designed to enable economies to be made in the collection of eggs and their delivery to Class A stores.

THE HOME-GROWN OATS (CONTROL AND MAXIMUM PRICES) ORDER, 1940.

The Ministry of Food has made the above Order which came into force on 1st February, 1940.

The Order controls the sale and distribution of home-grown oats in the United Kingdom, and prescribes maximum prices for oats sold for purposes other than use as seed. The Order requires all growers of oats to sell their oats only to approved buyers, that is to say, persons milling oats for human consumption, merchants authorised to issue wheat certificates under the Wheat Acts, and such other persons as may be licensed as approved buyers. Approved buyers will be free to sell feeding oats to any person, but they will be permitted to sell oats for oatmeal milling only to another approved buyer (including an oatmeal miller), and oats for seed only to another approved buyer or to a grower buying such oats for use as seed. The maximum price to be paid to a grower for oats sold for feeding purposes will be 11/- per cwt., and in the case of oats sold for oatmeal milling for human consumption, the maximum price to the grower will be 13/- per cwt. until 29th February, 1940, and 12/- per cwt. after that date. Maximum prices are also laid down for sales by merchants to other merchants, to oatmeal millers or to farmers and others for feeding purposes.

It should be noted that the prices prescribed in the Order apply to sales during the present cereal year. The prices for the 1940 crop will be fixed at a later date.

MAXIMUM PRICES FIXED FOR NORTHERN IRELAND SEED OATS.

By a further Order entitled, The Home Grown Oats (Control and Maximum Prices) (Northern Ireland) Order, 1940, dated 31st January, 1940, the above Order in its application to Northern Ireland stipulates that:—

“On the occasion of a sale of any oats grown in Northern Ireland (other than pedigree seed oats) for use as seed, the maximum price which may be charged shall, if the seller is the grower thereof, be 16s. per cwt.; or if the seller is an approved buyer be 17s. per cwt.

Provided that on the occasion of such a sale the additions to the maximum prices hereinafter referred to in Article 8 of this Order shall not be permitted.”

FLAX.

The Control of Flax (No. 5) Order, 1939, dated October 23rd, 1939, provides that all flax will be divided into six grades, as follows:—

			s.	d.	
No. 1	...	...	16	6	per stone in the market.
„ 2	...	...	15	0	„ „
„ 3	...	...	13	9	„ „
„ 4	...	...	12	6	„ „
„ 5	...	...	11	3	„ „
„ 6	...	...	10	0	„ „

Flax not good enough for No. 6 grade will be taken at a relative price.

As has already been announced, the price for the 1940 Northern Ireland flax crop has been fixed at 17/6d. to 22/6d. per stone with an average price of 20/- per stone.

POTATO MARKETING.

POTATOES (1939 CROP) (CONTROL) ORDER, 1940.

POTATO (1939 CONTROL) (CHARGES) ORDER, 1940.

These Orders, which came into force on Monday, 12th February, prescribe revised maximum prices for ware potatoes, and introduce minimum prices to growers for both ware and seed potatoes.

Maximum retail prices for single lb. sales are substantially unchanged. Housewives in Northern Ireland will, therefore, still be able to buy King Edward class at $3\frac{1}{2}$ d. per $3\frac{1}{2}$ lb., and other classes at 3d. per $3\frac{1}{2}$ lb.

An insurance fund is established by the collection of a tonnage levy from "first buyers" which will be used, subject to a deduction in respect of the cost of the scheme, to ensure to growers a reasonable return on any surplus ware potatoes of the 1939 crop. It will be understood that the Minister's assurance (given in the House of Commons on the 13th December) of a reasonable return to growers for any surplus crop remaining at the end of the season does not imply that the Insurance Fund will be used to guarantee the payment of the prescribed minimum prices for sales of surplus stocks. The levy payable by merchants who are first buyers of ware potatoes is 5/- per ton—equivalent to 3d. per cwt., or approximately $1/37$ th of 1d. per lb.

Growers, being given an assured market and stabilised prices, will be required to conform to certain standards of dressing which will provide the consumer with a guarantee of soundness. Provision is made for the sale of sub-standard samples under special licence.

From the date of the Order growers of ware potatoes in Great Britain and Northern Ireland may sell only to "licensed first buyers" i.e., licensed merchants and licensed retailers. Grower-salesmen will be licensed to sell their own ware potatoes. Similarly, growers of seed potatoes may only sell to "licensed seed potato merchants." Provision is made, however, for sales of both ware and seed potatoes through the agency of "licensed auctioneers." Sales of ware potatoes of 1 cwt. or less may be made to unlicensed buyers.

"Licensed first buyers" are required to keep at their principal places of business records of their dealings in ware and seed potatoes, which records are subject to inspection, and also to render monthly returns of their dealings. Growers are also required to keep records of their sales. Retailers need only keep separate records of potatoes purchased from merchants and growers. This applies to both seed and ware potatoes. Records of sales by retailers to consumers are not necessary.

The Potatoes (1939 Crop) (Control) Order, 1940, codifies the existing Orders of the Ministry of Food relating to potatoes, and applies to the whole of the United Kingdom with the exception of certain specified areas in Scotland and Wales to which the Potato (1939 Crop) (Charges) Order, 1940, also does not apply.

The Orders apply to the Isle of Wight, but sales of potatoes by wholesale and retail in the Island are not subject to the maximum prices laid down in the schedule for ware potatoes.

These plans have been prepared by the Ministry of Food with the co-operation of the Agricultural Departments of England and Wales, Scotland and Northern Ireland, and after consultation with the potato producers, merchants and retailers.

WARE POTATO PRICES.

The following are the maximum and minimum growers' prices in Northern Ireland.

Variety Classification.	Growers' prices f.o.r. or on Buyer's Lorry	
	Shillings per ton	
	Maximum	Minimum
Grade A (1) King Edward, Gladstone	100/-	80/-
(2) Kerr's Pink, Arran Victory	90/-	70/-
Grade B (1) Up-to-Date, Dunbar Standard, Arran Peak	90/-	70/-
(2) Any other variety	80/-	60/-

SEED POTATO PRICES.

The following are the minimum prices for Class I "Certified" seed of some of the principal varieties.

Variety	per ton	Variety	per ton
Arran Banner	90/-	Gladstone	110/-
Arran Consul	100/-	Kerr's Pink	90/-
Arran Pilot	135/-	Majestic	90/-
Arran Peak	110/-	Up-to-Date	100/-
Arran Victory	90/-	Field Marshal	110/-
Dunbar Standard	110/-	King Edward VII	100/-

The maximum price is 5/- per ton more in each case.

Where potatoes are brought into store for re-bagging a deduction of 10/- per ton may be made from the above prices.

LAND FERTILITY SCHEME.

THE VALUE OF LIME AND THE NEED FOR IMMEDIATE APPLICATION.

At a time like the present too much emphasis cannot be laid upon the importance of the application of increased quantities of lime to land for the purpose of promoting the general fertility of the soil, and rendering it capable

of yielding the maximum nourishment for crops and for the improvement of grassland. The prevailing urgent necessity of providing for increased home production of barley is only one of many factors which enhance considerably the importance of lime as a fertiliser.

The Ministry's records under the Land Fertility Scheme reveal gratifying evidence of a marked increase in the demand for lime on the part of farmers, showing that the need for meeting war demands for increased home food production has been widely appreciated. For instance, during the months November and December, 1939, and January, 1940, there were 2,940 applications for contributions under the Scheme in respect of 16,100 tons of lime, as compared with 2,028 applications for 10,585 tons in the corresponding months of 1938/1939. More recent information reaching the Ministry indicates, however, that in some districts there is a tendency to delay the application of lime to land. The Ministry, accordingly, desires to take this opportunity of urging upon farmers the desirability of making immediate arrangements for liming their land so that the inevitable heavy demands upon their time in the spring for the task of preparing the ground and sowing and planting of crops will not cause any dislocation of work. Liming is of very special importance in respect of all land being sown to barley.

Farmers who have not previously purchased lime or slag under the terms of the Scheme should bear in mind the following main conditions to be complied with:—

- (1) The material must be purchased from an approved supplier. Lists of the names and addresses of approved suppliers of lime and of basic slag are available for inspection at all Police Barracks and Creameries in Northern Ireland.
- (2) The State contribution is payable only in respect of consignments of two tons or over either of lime or of basic slag. A consignment of one ton of lime and one ton of slag would not be eligible for the contribution.
- (3) The contribution is payable only in respect of lime and basic slag produced in the United Kingdom.
- (4) Contribution may be claimed only in respect of lime or basic slag which is being applied to agricultural land owned by a *bona fide* occupier of such land. The term "agricultural land" means any land used as arable, meadow or pasture ground, or for the purpose of poultry farming, market gardens, nursery grounds, orchards, or allotments.

It may be of interest to some farmers to learn that the contribution is also payable in respect of lime produced by themselves and applied to their own land. Special conditions must, however, be observed in such cases before production is begun, and farmers who have facilities for producing lime for

application to their own farms are, therefore, advised to communicate with the Ministry if they desire to claim the contribution under the Scheme.

SALE OF FERTILISERS.

MERCHANTS MUST BE LICENSED.

A statement issued by the Ministry of Agriculture, Northern Ireland, draws the attention of merchants in Northern Ireland who deal in fertilisers to the Control of Fertilisers (No. 3) Order, 1940, dated January 8th, 1940, made by the Minister of Supply under Regulation 55 of the Defence (General) Regulations, 1939. On and after February 12th, 1940, no person may produce for disposal, or distribute wholesale any fertiliser except under the authority of a licence granted to him by the Minister of Supply. Such licence holders must forthwith compile a register of the names and principal addresses of persons who are prospective purchasers of fertilisers for resale, and who make application to them to be entered on their distribution registers.

Copies of the Order referred to may be obtained from H. M. Stationery Office, 80, Chichester Street, Belfast.

AGRICULTURAL WAGES BOARD, NORTHERN IRELAND.

The Ministry of Agriculture announces that the Agricultural Wages Board for Northern Ireland has now been constituted as follows:—

(a) Members appointed by the Minister of Agriculture.

Mr. Samuel Reid, M.A., Taxing Master, Royal Courts of Justice (Ulster), Chichester Street, Belfast.

Mr. W. H. Fitzsimons, F.C.A., C/o. Messrs. Wright, Fitzsimons & Mayes, 10 Ocean Buildings, Donegall Square East, Belfast.

Mr. J. B. Getty, LL.B., C/o. Messrs. Moorhead & Wood, 30 Rosemary Street, Belfast.

(b) Members appointed by the Ulster Farmers' Union.

Mr. David Ewart, J.P., Ganaway, Millisle, County Down.

Mr. James E. Flanagan, Drumlaghy, Letterbreen, County Fermanagh.

Mr. John F. M'Lenaghan, Car Hill, Garvagh, County Londonderry.

Mr. Charles Magee, Carnmeen, Newry, County Armagh.

Mr. Robert W. Pinkerton, Crosthagherty, Ballymoney, County Antrim.

Mr. John D. Watson, Dervaghroy House, Beragh, County Tyrone.

(c) Members appointed by the Amalgamated Transport and General Workers' Union.

Mr. James Bradley, Boston House, Enniskillen, County Fermanagh.

Mr. W. Burns, Bishops court, Downpatrick, County Down.

Mr. James Keating, 66 Victoria Street, Belfast.

Mr. John Mills, Railway Street, Armoy, County Antrim.

Mr. D. Perry, Irish Street, Downpatrick, County Down.

Mr. A. J. Ryan, 66 Victoria Street, Belfast.

The Ministry has appointed Mr. Samuel Reid, M.A., to be Chairman of the Board.

Mr. James Shanks, Ministry of Agriculture, has been appointed Secretary to the Board.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

PLOUGH AND TILL AND SOW.

The excellent response made by the majority of farmers to the appeal of the Minister of Agriculture for an additional 250,000 acres of crops in 1940 augurs well for the success of the "Grow more Food" campaign. This response indicates clearly that the farmers of Northern Ireland generally are realising the responsibilities they have as custodians of the soil, and the importance of producing as much food as possible in time of war.

While the appearance of the countryside is changing rapidly as field after field which, until recently, were in grass are now showing freshly turned up soil, there are certain districts and farms where the ploughing is still in arrears and much remains to be done. To the farmers affected a special plea is now made. It is felt that no farmer in Northern Ireland will wish to have it said of him that he failed to do his duty at this time of his country's need. The part the farmer has to play in this war is a most important one. It is to produce as much food for both man and beast and as much raw material—flax—as is possible. These are of vital necessity to a nation at war. There are many ways in which a man may serve his country in the time of an emergency. If he joins one of the armed forces he is taking the direct method of defending his country and the cause of freedom, but the armed forces require food and the other weapons of war, and the farmer who grows and produces food and other essentials is a soldier on the home front who is making it possible for those on the fighting fronts to succeed. Therefore, while the men in the armed forces are risking their lives in defending the country and maintaining its freedom, farmers must do their part willingly under less risky conditions on the home front and thus support their fellow-men overseas. Every additional acre under the plough and every additional ton of wheat, potatoes, oats, barley, flax, beans, roots, etc., will shorten the war and speed up victory.

The Compulsory Tillage Order should not be regarded as a law which has to be complied with but as a means towards an end—that end being the production of food. If there were no Tillage Order it would be to every farmer's interest to grow food for his stock and for human consumption so as to make both himself and the country as a whole more self-sufficient and less dependent on imported foods.

With the great reduction in the supply of imported feeding stuffs, the income of the farmer will now be largely in proportion to the area of arable crops which he grows. The farmer who grows an adequate acreage of crops this season will have foods for his livestock next winter and be comparatively

independent of purchased foods. The prices for crops as such and for livestock to which they may be fed will be such as to leave a satisfactory margin of profit, so it follows that no matter whether the crops are sold or fed to stock the grower will benefit. To sum up, the growing of crops and the production of more food will not only speed up victory but increase the profits of the farmer.

LATE PLOUGHING.

When ploughing lea land late in the season the furrows should be thrown well over on their backs and not left set up on their edges. Furrows which are thrown well over are always tending to tighten together but furrows left on their edges will not pack tightly. It is essential for the production of good brairds on old lea land to have a firm seed-bed with no vacant spaces left between the ploughed furrows underneath the surface. If such spaces are left, because of insufficient packing of the ploughing and lack of consolidation of the ground when preparing the seed bed, many of the young plants will fail by reason of their roots getting into the vacant spaces. Flat ploughing is also an advantage by reason of the fact that it is less liable than "set up" ploughing to be torn up into grassy sods when being harrowed.

WAR TIME CROPS.

Under war conditions there is need for an expansion in the area of all the crops normally grown such as wheat, oats, barley, beans, potatoes, flax, roots, cabbage and kale.

Wheat is a most valuable crop, as flour for human consumption is made from wheat grain, and bran and pollard which are the by-products in the manufacture of flour from wheat are very important foods for stock. The value of oats on the farm is appreciated by all farmers but no crop produces as much food value per acre as a good crop of potatoes. The labour and cost involved in growing an acre of potatoes are admittedly greater than for a cereal crop but an acre of an average crop of potatoes will produce at least twice the amount of food value that would be produced from an acre of an average crop of any of the cereals.

Roots, cabbage and kale are all very valuable crops for stock feeding, especially on a farm where a herd of cows is kept or where it is usual to fatten a number of cattle during winter.

There are, however, three crops which demand special mention as war conditions have made it essential that they should be grown on a far larger scale than in peace time. They are Beans, Barley and Flax.

BEANS.—How many farmers have looked as far ahead as next winter when they will be making up rations for their livestock very largely from home-grown foods? The crops normally grown on the home farms—wheat, oats,

barley, roots and potatoes—are all relatively rich in carbohydrate or starchy material, but are deficient in protein and would not, therefore, be suitable for making properly balanced rations without the inclusion of a food rich in protein. Previously, imported protein-rich foods such as cotton cake, earthenut cake, soya bean meal, meat meal and fish meal were used to mix with the starchy foods to form balanced rations for livestock. Under war conditions, however, the supply of these imported protein-rich cakes and meals is limited and farmers are faced with the problem of producing at least part of their requirements of protein-rich foods on their own farms.

The only crop which is rich in protein and suitable for cultivation in Northern Ireland is field beans and every farmer who has suitable land should grow at least a small area of beans. Those who have no beans for including in their rations next winter may find it difficult to provide properly balanced rations for their stock.

Beans when ground into meal may be fed in suitable proportion to all classes of livestock and are particularly suitable for dairy cows. Bean straw, if the crop is not over-ripe when cut, is a valuable fodder for feeding to cattle being richer in protein and minerals than oat straw.

A further advantage about growing beans is that the sowing and harvesting of the crop do not coincide with the sowing and harvesting of cereals or the planting of potatoes. The beans should be sown in February or early March before the time for putting in the other crops and they will not be ready for harvesting until after the cereals have been harvested. Thus, the growing of an acre of beans helps to spread the work over a longer period in spring and at harvest time.

The best soil for beans is a well-drained, heavy clay which is well supplied with lime, but good crops can also be grown on medium loams in good heart. The average yield of grain is from 20 to 25 cwt. per acre but on good bean soils yields of over 30 cwt. per acre are frequently obtained. 30 cwt. of beans contains as much protein as 25 cwt. of linseed cake and a much larger quantity of carbohydrate material.

A leaflet on "The Growing of Beans for Stock Feeding" has been issued and copies may be had free on request. Extracts from it are given on pages 632 to 634.

BARLEY.—The fact that barley meal is a first class food for pigs of all ages is generally recognised and before the outbreak of war large quantities of barley were annually imported into this country for pig feeding. Practically all the barley used for pig feeding in Northern Ireland—a very large quantity—was imported from overseas as only about 3,500 acres of barley were grown on the home farms. Under war conditions the supply of imported barley has

been greatly reduced and the supply of maize which was entirely from overseas has also been considerably reduced, thus leaving the pig feeder the problem of making up rations largely without maize and barley.

Maize cannot be grown in Northern Ireland so that the farmer can do nothing directly to improve the shortage of maize meal. Barley, however, can be grown successfully in Northern Ireland, so the obvious solution of the problem is to produce barley on the home farms to take the place of maize and imported barley. In the absence of maize meal it would be almost impossible to make up from home-grown foods a suitable ration for fattening pigs without including barley meal. Barley meal, which is the ground grain, can successfully form up to 50 per cent. of the meal ration for pigs, whereas ground oats should not form over 20 per cent. of the meal ration as its high fibre content makes it a difficult food for pigs to digest. The digestive system of pigs, unlike that of cattle and horses, is not capable of dealing with fibrous foods.

Barley is not a difficult crop to grow, the main points being to grow it in a soil which contains plenty of lime and not to put the seed in too deeply. Leaflet No. 95 deals in detail with "Barley Growing", and copies may be had free on request.

FLAX.—With the outbreak of war the nation's requirements of flax fibre have increased enormously. Apart from the export trade in linen, flax fibre is now needed for the manufacture of various war materials, so that under present conditions the area of flax grown in the British Isles needs to be considerably increased. Northern Ireland is one of the most suitable countries in the world for the production of good quality flax fibre and Northern Ireland farmers have in the past gained full experience in the growing and harvesting of the crop. It is hoped that at least 50,000 acres of flax will be grown in 1940. This is almost $2\frac{1}{2}$ times more than last year's area of 21,000 acres. A leaflet entitled "The Growing and Harvesting of Flax" intended to be of use to those who have little or no experience of handling the crop has been issued by the Ministry and copies may be had free, on request.

Farmers are not asked to grow flax on chance. The price for the 1940 crop has been fixed at from 17/6d. to 22/6d. per stone with an average price of 20/-. Even allowing for increased costs of production this range of prices should leave a favourable margin of profit to the grower.

A further advantage of flax is that the harvesting of the crop is completed before the corn crop is ripe and so does not clash with the main rush of harvest work.

THE CROPPING OF LEA LAND.

Under the system of farming most commonly practised in Northern Ireland oats is the crop which is generally taken on newly-broken-up grassland. This year there will be at least 250,000 extra acres of lea land under the plough and if practically all this were sown with oats and acreage of oats would be very high in relation to other crops. A considerable area of the lea land being ploughed is equally suitable for the growing of such crops as beans, barley, flax and potatoes as it is for growing oats, and in some cases one or other of these crops would be more suitable than oats.

There is much old lea being ploughed which is in very good heart and on such land there would be a grave danger of the oat crop lodging. Neither barley nor flax would be suitable crops for such land but potatoes or beans, depending on the type of soil, would be very suitable.

If the soil is free working so that the ground could be easily cultivated then potatoes would be a suitable crop. Potatoes would also be a suitable crop for growing on lea ground which is badly infested with creeping thistle as the after-cultivations carried out for the potato crop afford an opportunity for keeping down the thistles. Quite good crops of potatoes can be grown after old lea using artificial manures alone so that if supplies of farmyard manure are scarce that manure may be omitted under such conditions.

If the soil is stiff and heavy, provided it is well drained and limed, the most suitable crop would be beans or a mixed crop of beans and oats. Beans are not very liable to lodge and in the case of the mixed crop the beans will keep the oats standing. Another advantage of growing beans on old lea is that the bean crop is more resistant than cereal crops to attacks of wireworms and leather jackets ("cutworms") should these be present in the soil. Full particulars of the growing of beans and of a mixed crop of beans and oats are given in leaflet No. 97, copies of which may be had free on request.

Barley may also be grown successfully on certain types of lea land, preferably the lighter, sharper soils which are not too rich in nitrogen. Barley should not be grown on very rich soils as it is more liable to lodge than oats. Important points in the growing of barley on lea ground are to see that a fine firm seed-bed is produced in which the seed is not buried too deeply and to see that the soil is not lacking in lime.

Flax is a suitable crop for growing on lea land which is not too rich and where the soil is of a medium to heavy nature. Here again a fine firm seed-bed is essential. If the land is very rich, a rank growth of flax straw which is liable to lodge will be produced, and the fibre from such a crop is usually of poor quality, being weak and soft.

IMPORTANCE OF A FIRM SEED-BED.—When growing beans, barley, flax, oats, or wheat on lea land it is very important that the seed-bed should be

firm underneath. The ploughing should be thoroughly consolidated by rolling so as to close up the vacant spaces between the ploughed furrows; this is especially necessary on land which was ploughed late in the season. If the seed-bed is not thoroughly consolidated the roots of the young plants will pass into the vacant spaces between the furrows which will cause a severe check to growth. In addition, thorough consolidation helps to prevent the land drying out and makes conditions less favourable for the ravages of wireworms and leather-jackets ("cutworms") and more favourable for the production of a vigorously growing healthy braird.

EARLY GRASS.

This year with the comparative shortage of feeding stuffs, it is more important than ever that there should be some spring grass as early as possible. Every farmer should try to have an "early bite" for stock. A growth of fresh young grass may be obtained at from 2 to 3 weeks earlier than usual by applying a nitrogenous manure to a field of grass as soon as possible after the middle of February. Sulphate of Ammonia, Nitro Chalk, or Nitrate of Soda is suitable and one or other of these should be applied at the rate of 1 cwt. per statute acre. Grazing which is not more than three years old should, if possible, be chosen for manuring for an "early bite" of grass, but the same land should not be dressed with a nitrogenous manure two years in succession unless a dressing of phosphate and potash is also applied. A field of fresh, clean grazing which has been so treated will provide a very useful early "bite" for the sheep and young lambs, or for other stock requiring it, and such treatment is especially useful this year.

LIMING.

Attention is again directed to the importance of applying lime to the soil. Through the medium of the Land Fertility Scheme farmers have an opportunity of obtaining lime at half the usual cost and every advantage should be taken of these favourable conditions while they remain in operation. All the usual crops, with the exception of potatoes, will benefit from an application of lime and some, including barley, beans and turnips cannot be grown successfully without it if the land is sour.

Under present conditions it is more than ever necessary to produce full crops, healthy crops and quality crops. Lime will greatly assist in doing so. Losses of all sorts must be prevented and the preservation of health in livestock is of first consideration. Lime is a great cleanser and purifier, and pastures which have been limed either directly or during the course of the crop rotation will be much improved in quality and food value, and made safer for the health of the stock grazing on them. Money spent on liming land is money spent on insuring crops and animals against diseases and pests.

SEASONAL LIVESTOCK NOTES.

STOCK-OWNERS! PREPARE FOR THE FUTURE.

Stock-owners in general have experienced a very difficult winter due to the shortage of imported feeding stuffs.

In the circumstances a reduction in the numbers kept was the only possible thing that could be done, but in view of the importance of livestock and livestock products to the farmers of Northern Ireland it is a vital necessity that the livestock population should be restored to the normal as soon as conditions permit.

There are two essentials which must be fulfilled before the livestock population can be restored to normal. One of these is that a sufficient quantity of feeding stuffs must be available and the other is that the foundation breeding stock must be retained. During the war and even for some time after, farmers cannot hope to get anything like their peace time requirements of purchased feeding stuffs so it will immediately be obvious that under war conditions farmers must produce a much greater quantity of feeding stuffs on their own farms than in peace time. Neither farmers nor the Ministry wish to experience another shortage of feeding stuffs such as occurred during the past winter. Farmers have the remedy in their hands; they should prepare for next winter now by utilising every possible acre for the production of arable crops. The numbers of livestock which farmers will be able to keep next winter will be roughly in proportion to the amount of home-grown foods available, and since £8 out of every £10 of the total farm income is derived from livestock and livestock products, the importance of maintaining the livestock population will be obvious. The second essential for the future increase of the livestock population, namely, that all good breeding animals should be retained is an obvious one, as these are the animals on which the future increase will depend.

If farms are depleted of sound breeding stock of good type, the rebuilding of the herds and flocks will be an expensive as well as a slow process when the time comes to do so.

To sum up, therefore, it is essential that preparations be made now for the future by retaining all good breeding stock and by putting every possible acre under the plough for the production of arable crops. These are necessary to take the place of the imported feeding stuffs the supply of which is smaller and more irregular than normal—a state of affairs that may continue during the war and even for a time after the war is over.

DAIRY COWS.

From now until the end of May is the most popular season for having cows calving down on farms where the milk is sold for manufacturing purposes,

such as to a creamery. More than two-thirds of the total milk produced in Northern Ireland is sold for manufacturing purposes and therefore the great majority of the calves are born during the season from February to June.

MANAGEMENT OF IN-CALF COWS.—There are certain points in the management of the in-calf cow which have a considerable influence on the milk yield following calving. A very important one of these is the length of time the cow is dry before calving takes place. Every cow should have at least 6 weeks, and preferably 8 weeks, rest from milking before she is due to produce another calf so that she may have a chance to build up her mineral and food reserves before beginning another strenuous lactation. This is especially important in the case of heavy milkers. The subsequent yield of a cow which gets no rest may be from 15 to 20 per cent. lower than if she had been dry for from 6 to 8 weeks before calving.

Cows which are still milking at 8 weeks before calving time is due should be put dry. To do so, the feeding should be reduced to hay and water and milking stopped. Usually when this is done milk secretion ceases and the milk in the udder is reabsorbed, but the udder should be inspected daily to see that the animal is not in pain. If the cow is in pain some of the milk should be withdrawn at intervals of one or two or even three days, depending on the amount of milk the cow has. The intervals may be gradually made longer and, provided only hay and water are given, the cow will usually go dry in a short time.

Once the cow is dry a more concentrated ration may be given, the amount of meals fed depending on the supplies available and on the condition of the cow. The cow should be in good flesh by the time she is due to calve. An allowance of from 20 to 30 lb. roots or from 10 to 15 lb. sliced potatoes per head daily is beneficial to in-calf cows. Even up to 50 lb. roots or 25 lb. sliced potatoes may be given if meals are scarce. Straw is a suitable fodder, especially if a fairly liberal amount of meals and roots or potatoes is given, and the straw is from a crop which was used as a nurse for grass and clover seeds. Good straw is better than bad hay.

In-calf cows should be given a run out daily, but care should be taken to see that they are not left standing about the gate on a cold day. Water should be offered at least twice daily and the cows should be given time to drink all they want, if water is not laid on in the house.

In the case of a heifer carrying her first calf the udder should be massaged frequently before calving. This makes the animal accustomed to the udder being handled and reduces the difficulties of milking timid or nervous first calvers.

Cows which are near calving time should be closely watched so that they may not calve in unsuitable surroundings or that they or their calves may be lost for want of assistance.

CALVING.—The cow should calve in clean surroundings. During the winter and spring months the ideal place for a cow to calve is a roomy loose-box which is well bedded with clean straw. Where a loosebox is available it is a wise policy to house the cow in it for the last few nights before calving.

On many farms the cows are allowed to calve in the stalls. The danger in this practice is that if the cow calves unexpectedly, say during the night, there is a risk of the calf getting on its back in the channel, and smothering before someone arrives, or of being kicked and hurt by the other cows. If a cow is to be left in the stall to calve it is a wise precaution to fill up the channel with straw each night before going to bed for some nights prior to the time she is due.

Where help has to be given to the cow when calving care should be taken that the hands are thoroughly cleaned and disinfected. Force should not be resorted to in any circumstances, including slowness in calving, as many cows are naturally slow and it is not unusual for a cow to take up to 24 hours or even longer from the time she is first noticed to be "sick" until the calf is born. To try to deliver a calf before nature intended it to be born will only do harm. Provided there is nothing wrong and the presentation is normal help should not be given until after it is seen that it is essential and then only when the cow is helping. The pull should always be exerted in a direction towards the cow's feet. If the presentation is abnormal and it is seen that the calf cannot be born without being righted it is a wise policy to call in a Veterinary Surgeon at once as delays in such circumstances are dangerous.

PREVENTION OF MILK FEVER.—Milk Fever is a serious ailment which develops generally within the first few days after calving and is most likely to occur in the case of heavy milkers. It cannot always be prevented, but if certain precautions are taken the number of cases can be greatly reduced. All cows, and especially the heavy milkers, should be given adequate exercise and kept in a laxative, healthy condition before calving. For the last few days before calving the quantity of meals fed should be greatly reduced or even omitted altogether and no meals should be fed during the first week or so after calving. A suitable daily diet would be from 20 to 30 lb. roots, and from 14 to 20 lb. good hay or straw together with two or three bran mashes. In addition, a plentiful supply of water, from which the dead cold has been taken, should be given.

It is a good plan to give a purgative drench before and after calving as this tends to check the flow of milk immediately after calving which is the most likely period during which milk fever will appear. A suitable drench can be made by dissolving $\frac{3}{4}$ lb. glauber salts and one tablespoonful of ground ginger in from $\frac{3}{4}$ to one pint of warm water.

It is very important also that the udder should not be milked out clean for the first few days after calving. For the first day or two only enough milk

to feed the calf should be withdrawn and after each milking the udder should be massaged so as to leave the teats filled up with milk. During the remainder of the first week the udder should not be more than half emptied. After 9 or 10 days the udder may be milked dry.

CARE OF BREEDING BULLS.

There is no other animal on the farm which needs more careful feeding and management than the breeding bull. The aim should be to keep the bull in a healthy breeding condition so that he will be active and fertile. If fertility is to be maintained adequate fresh air, light, and exercise are essential.

The feeding is also important. If the bull is under fed he will become poor and if underfeeding is continued long enough the bull will become infertile. Again if a ration which is deficient in certain vitamins (Vitamins A and E) and minerals is fed for a sufficiently long time the bull will also become infertile, although outwardly he may appear in quite good condition. Green food contains the necessary vitamins and minerals and, where possible, an allowance of green food should be fed. Good quality silage and roots are also useful foods for a breeding bull.

Neither should a breeding bull be overfed, as if this is done, he will become overfat, lazy and liable to prove infertile. The feeding depends on the amount of work the bull is getting to do and the ration should be so adjusted as to keep the bull in a healthy, active condition.

NEWLY-PURCHASED BULLS.—Many farmers will be purchasing bulls at the coming spring sales. A newly-purchased bull requires special treatment during the first week or so after purchase as he is liable to suffer from digestive trouble due to the change of feeding and surroundings and the effects of the journey to and from the sales. If the bull has had to spend a day or two at the saleyards in the meantime, even greater care after he reaches the new farm, is necessary.

For the first few days after arrival at the farm the bull should be given a light diet such as bran mashes, green food or roots and hay, with an adequate supply of water. After a few days when he has become accustomed to the new surroundings the ration should be gradually changed to that desired by the new owner. Further advice on the care of breeding bulls is given in leaflet No. 61, copies of which may be had on request.

SHEEP.

LAMBING.—From now on lambing will be general on lowland farms and a little extra care and attention given to the lambing flock at this season will be well repaid. Notes on the care of ewes at lambing time were given in the January issue of this report. Useful information on the general care and management of sheep is given in leaflets Nos. 47 and 63.

SEASONAL GARDEN AND ORCHARD NOTES.

SPRAYING APPLE TREES.—Advantage should be taken of every opportunity to push ahead with the work of spraying apple trees with tar-oil washes. This work should not be undertaken however during showery weather; and, during frosty periods, the spraying should cease each day in time for the wash to dry on the trees before the temperature falls to freezing point. The pumps, hoses, etc., should be emptied of spray material each evening as soon as the work for the day is finished.

MANURING APPLE ORCHARDS.—Orchards which require nitrogenous manure should get a dressing of nitro-chalk or of sulphate of ammonia in late February or early March. Generally speaking, trees which made less than nine inches of growth last year and those on which the bark is of a reddish brown colour may be regarded as needing nitrogen. The amount of fertilizer to be given will vary according to the age and variety of the tree but from 1 to 1½ lb. scattered over the ground underneath the spread of each tree is an average dressing. A dressing of sulphate of potash (if this is obtainable) or alternatively of muriate of potash should also be applied at the same time at the rate of 4 cwt. per statute acre.

STRAWBERRIES.—As soon as the ground can be got into a suitable condition all blanks in the plantations made last autumn should be made up and if more plantations are required these may also be made now. Strawberries planted in the spring should not be allowed to fruit in the year of planting. This can be ensured by removing the flowers as they appear.

CABBAGE AND LETTUCE.—Cabbage and lettuce plants which have wintered in the seed bed, and cauliflowers which have wintered in a cold frame, may be planted out as soon as the ground can be got ready. A sheltered border should be selected for them if possible. The blanks in the cabbage plot planted out last autumn should be filled and the soil dressed now with nitrate of soda at the rate of 3 cwt. per acre. After the manure has been applied the soil should be cultivated with a hoe or grubber. If the plants are given a slight moulding with the soil, it will encourage growth.

POTATOES.—On warm soils and in sheltered positions early varieties of potatoes can be planted now. The stock of seed of the later varieties should be examined and the tubers brought into the light so as to toughen the buds, and prevent them from getting drawn.

OTHER VEGETABLES.—Broad beans and early peas may now be sown out-of-doors if the ground is in a suitable condition. Shallots and potato onions should be planted if this has not been done already. Early in March a

sowing of onions and parsnips should be made in the position in which they are to mature. Later in the month a sowing of Brussels sprouts, cabbage, cauliflower and lettuce may be made in seed-beds out-of-doors. Particulars of vegetable growing are given in Leaflet No. 67.

RHUBARB.—New plantations of rhubarb can be made now. This plant requires a deeply dug and well manured soil. Old established crowns can be divided with a sharp spade and each piece, having two or three good buds, used for the new plantation. The crowns should be planted at such a depth that the buds are just below the surface when planting has been completed. No stalks should be taken from plantations of rhubarb until the third year after planting.

FLOWERS.—Stocks of dahlia tubers should be examined and any decaying ones removed. The sound tubers should be placed in boxes of moist soil and the boxes placed in a greenhouse or cold frame. Provision should be made for protecting the tubers from frost. Seeds of sweet pea may be sown in pots or shallow boxes of soil and the latter placed in the greenhouse or cold frame. When the seedlings appear they should be kept close to the glass so as to encourage sturdy growth.

GENERAL.—The manuring and digging of vegetable ground should be completed as soon as possible. All ditches should be cleaned out and the opening of all drains examined to see that these are working properly.

BEE-KEEPING.

Bee-keepers should examine their stocks at the first suitable occasion and ascertain what quantity of stores remains. Towards the end of February stimulative feeding may begin. This consists in giving each stock daily a small quantity of syrup made by dissolving 3 lbs. of good white sugar in one quart of water. The syrup should be given warm and late in the evening, and only sufficient for immediate consumption by the bees should be given on each occasion. Should any of it be stored by the bees the quantity being supplied should be reduced.

ALLOTMENTS.

A second leaflet in the Allotments series of leaflets has been prepared and supplies are now available. This leaflet continues the advice given in leaflet No. 1, "Allotments—Preparation of the Ground", and deals with the arrangement of the cropping of the allotment, rotations, quantities of seeds required and the kinds and varieties of vegetables recommended. Copies will be sent on request. The title of the leaflet is "Cropping the Allotment."

SEASONAL POULTRY-KEEPING NOTES.

What has been said in the Seasonal Livestock Notes of this issue about preparing for the future by putting the maximum acreage under the plough for the production of arable crops and retaining the best breeding stock applies with equal force to the poultry-keeper. Every poultry-keeper is advised to read that paragraph and to prepare for the future by doing his share in the production of additional food.

CULLING.—Even in peace time when plentiful supplies of feeding stuffs were available the culling out of all weaklings and other unprofitable birds was an important operation in the successful management of poultry. The feeding of poor, unproductive birds is at all times uneconomical and furthermore such birds, many of which are weaklings, have little resistance to the many diseases and pests which may attack poultry. They are therefore always a source of danger to the rest of the flock.

Under war conditions the necessity of culling is more urgent than ever because neither the farmer nor the nation can afford to give foods which are scarce and dear to unproductive stock. Rigorous culling is a national necessity in war time.

Culling should be a continuous process so long as there is a bird on the farm which shows lack of vigour or signs of being unproductive, whether this be a laying hen, a day-old chick or a bird from the breeding flock.

Many farmers and poultry-keepers, having read so far, may feel that if they decided immediately to carry out the advice given they would be in doubt as to which birds to cull and which to keep. This is quite a genuine difficulty and it is the desire of the Ministry to help poultry-keepers in every way possible. Valuable information on the culling of flocks is given in leaflets Nos. 2 and 29 and copies of these leaflets can be had free on request. Further advice can be obtained from the local Poultry Instructor who will give a culling demonstration on request pointing out the desirable and undesirable features to be looked for in birds when culling the flock.

Those wishing to have the advice of the Poultry Instructor should write to the County Agricultural Executive Officer who will arrange for the advice to be given. The names and addresses of the County Agricultural Executive Officers were given in the January issue of this report.

IMPORTANCE OF FREE RANGE.—At all times it is admitted that the keeping of poultry—chickens, layers or the breeding flock—on free range is conducive to the production of healthy, vigorous birds. When kept under such natural conditions the birds have access to fresh air, green grass, which provides Vitamin A, and direct sunlight, which provides Vitamin D, all of which

are essential for health and vigour. During recent years, however, the practice of keeping birds under intensive or semi-intensive systems has become more widespread but under these conditions much more skill and careful management are necessary than where the birds are kept on free range, and even then in many cases the birds which are kept intensively are more subject to attacks of disease and lack the constitutional vigour of the birds kept under natural conditions.

When birds are kept intensively the Vitamins A and D, normally supplied by nature, must be supplied artificially by feeding codliver oil and green food to the birds. This is especially necessary in the case of young chicks. Maize is also a useful source of Vitamin A. Even when these deficiencies are made good, nature's other gift—fresh air—cannot be supplied to the same extent to birds kept intensively as to birds on free range. Fresh air is essential for health and vigour.

Under war conditions when supplies of codliver oil and maize are greatly reduced and when healthy and vigorous birds are a national necessity the keeping of birds on free range is recommended, as this system leaves nothing to chance and enables the poultry-keeper to make full use of the free gifts of nature—direct sunlight and fresh air. In addition, poultry on free range pick up a considerable proportion of their food requirements in the form of fresh young grass, insects, grubs and worms, thus economising as regards food supplies.

Poultry on free range should be housed in portable houses which should be moved frequently over the field. A fresh field should be chosen each year and the birds thus "rotated" as though they were a "crop" in the rotation. This keeps the birds free from parasites which are picked up from foul land. The birds when run in this way have a very beneficial effect on the land.

HATCHING.—The hatching of the heavy breeds may be done up to the end of March but not later than March. The light breeds such as the White Leghorn may be hatched until the end of April. Useful notes on the various points connected with hatching were given in the December and January issues of this report.

THE YOUNG CHICKENS.—Culling should begin when the chicks are being transferred from the incubator to the hover. All chickens which are weakly, abnormally small or malformed in any way should be killed, as they will never be profitable to rear and food should not be wasted on them. During the brooding period any weaklings should be removed and killed immediately they are spotted, as apart from being uneconomical to feed, these birds will be susceptible to disease and might be the cause of a disastrous outbreak of disease in the whole flock.

FEEDING AND MANAGEMENT OF CHICKENS.—As mentioned above, outdoor rearing of chickens is recommended. This may be accomplished by having a wire run attached to the house so that the chickens may go out and in as desired. After the first few days, when the weather is suitable, the chickens should be fed outside in the run, which should be moved frequently—once daily if possible—to fresh ground. Frequent moving to fresh ground keeps the chickens from picking through their own droppings, and prevents any serious attack of parasitic disease such as coccidiosis.

Limited supplies of a chick-rearing mash are available, and this mash may be fed dry, or after moistening with separated milk. Separated milk is a valuable food for young chickens. For the first few days tepid water should be provided for the young chickens to drink, but after the third or fourth day a quantity of separated milk may be added to the water, and this quantity gradually increased until the drink consists solely of milk, if available. Bran and pollard are also suitable foods for chicks if they can be obtained, and a mixture of bran, pollard and oatmeal, damped with separated milk, will be suitable feeding when the chicks are allowed out in a run of fresh, clean grass. If separated milk is not available a little of a high protein food such as meat meal or fish meal should be added to this mixture. During the winter months, when the rays of the sun are not very strong, the addition of a little codliver oil would also be beneficial to guard against leg weakness. When the birds are in an open grass run about 1 per cent. of codliver oil in the mash is enough, and the codliver oil should not be mixed with more than one week's supply at a time. The chick rearing mash which is on the market has the codliver oil already mixed.

GEESE.—The rearing of a flock of geese on most farms this year would be well worth while. The young goslings require far less attention than young turkeys or chickens, and they are far hardier and more easily reared. In addition, geese can be kept right throughout the rearing and fattening period practically without the meals and other foods which are so scarce and so necessary for other livestock and poultry. A flock of geese can be successfully reared on pasture alone and, furthermore, they can make use of pasture which other stock could not, such as odd isolated corners and boggy, swampy land, which would not be safe for other stock.

The young goslings need no hand feeding, except perhaps during the first week, provided they have plenty of free range. In autumn the flock is particularly useful for consuming partly rotted potatoes and unsound or low-grade apples. During the month of December, when the birds are in the

final stages of fattening, they can be confined in an open shed and given hand-feeding consisting of a small daily allowance of boiled potatoes and meals, and a feed of oats placed in the water trough. This is a profitable way of using up the small and unsound potatoes.

The eggs may be hatched under broody hens if geese are not already on the farm. Even if geese are available, it is advisable to hatch the first eggs by hens and to encourage the geese to continue laying. A hen will hatch from 3 to 5 goose eggs. Goose eggs for hatching can be obtained from the goose stations established in the different counties by the County Committees of Agriculture. A list of these stations for the particular County can be had from the local Poultry Instructor, or from the County Executive Officer. The Poultry Instructor will give further information on the management of geese on request.

THE GROWING OF BEANS FOR STOCK FEEDING.

Reasons why every farmer who has suitable soil will find it advantageous to grow at least a small area of beans this year are given on page 618 of this report.

The best soil for beans is a stiff clay, provided it is well drained and contains plenty of lime. Good crops may also be produced on heavy clayish loams, and on medium loams in good heart.

While the growing of beans on stubbles is recommended, this may not be possible on all farms, and good crops can also be grown on lea or after potatoes or roots. The advantages of growing beans on old rich lea are that beans are not liable to lodge, and they are more resistant than oats to attacks of leatherjackets ("cutworms") and wireworms should these be present in the soil. For the crop to be a success on lea it is essential to have a seedbed which is firm underneath.

When the crop is to be grown on stubble land in good heart a suitable manuring would be 15 tons farmyard manure per statute acre. On the poorer soils a dressing of 3 cwt. superphosphate and 1 cwt. 30 per cent. potash salts (or $\frac{1}{2}$ cwt. muriate of potash) should also be given. If supplies of a potash manure cannot be obtained a dressing of from 3 to 4 cwt. of potassic superphosphate should be substituted. Artificial nitrogenous manures are not required, especially if a dressing of farmyard manure is given.

If the beans are to be grown after potatoes or roots which have been well manured, or after old rich pasture, the quantity of farmyard manure can be

reduced, or that manure omitted if supplies are scarce. When no farmyard manure is applied the dressing of artificial manures per statute acre should be :

5 cwt. superphosphate,

1½ cwt. potash salts (30 per cent. potash),

or alternatively, from 6 to 7 cwt. of potassic superphosphate per statute acre.

Lime is of particular benefit to the growth of beans, and a dressing of from 20 to 30 cwt. per statute acre should be applied, especially if the land is heavy and the soil sour.

Only spring varieties of field beans are suitable for cultivation in Northern Ireland. The commonest of these are the Scotch Horse Bean and the Tick Bean or English Horse Bean. The Scotch Horse Bean is a tall-growing, hardy, heavy-yielding variety which is suitable for the heavier soils in exposed situations. The Tick Bean is a shorter strawed variety with smaller seeds and is more suitable for the lighter soils. It is also a heavy yielding variety.

Early sowing of spring beans gives best results and the seed should be sown in February or early in March, if soil conditions are suitable. Beans can be ploughed in when the soil is reasonably dry and before it is dry enough to prepare a seed-bed for a cereal crop.

Beans may be sown in wide rows and inter-cultivation carried out as for potatoes or roots, or they may be sown in the same way as a corn crop if no inter-cultivation is intended. When inter-cultivation between the rows is carried out the crop can to a certain extent be regarded as a cleaning one and this method of growing will be best where the beans are to be grown on stubbles to replace roots or potatoes in the rotation.

The stubble ground should be ploughed deeply in autumn or early winter as for potatoes and the farmyard manure ploughed down. Where liming is necessary the lime should be applied on the top of the ploughed land some time before sowing the beans. As soon as soil conditions are suitable in February or early March the ploughed and limed land should be cultivated, the artificial manures spread and the beans sown. If cultivation during the early stages of growth is to be done the beans should be sown in rows from 18 to 24 inches apart. This may be done either by using a corn drill or by ploughing the beans in scattering them in every second or third furrow. Where cultivation between the rows is not intended the beans can be sown in every furrow, or sown broadcast over the cultivated ground and covered by ploughing.

If artificial manures are to be applied they may be covered in with the beans.

When beans are to be grown on potato land, unless the beans are to be sown with a corn drill, it is not necessary to plough the land before sowing. The ground should be cleared of potato stalks, weeds, etc., and the beans ploughed in as described for the cultivated stubble land.

When beans are to be grown on lea land they should be sown with a corn drill or else broadcast on the ploughed land and covered in by harrowing in the same way as oats. When the seed is to be broadcast the ploughing should be done so as to leave ample cover for the beans; more cover than for oats is necessary.

The rate of seeding depends on the variety and on the method of sowing. A smaller seeding of the Tick Bean than of the larger size Scotch Horse Bean will suffice. If the seed is sown with a corn drill or sown in rows slightly less seed of either variety will be required than where it is broadcast and ploughed in or covered by harrowing. In general, a seeding of from 12 to 16 stones of seed per statute acre is satisfactory.

BEANS AND OATS.

A mixed crop of beans and oats is very useful, particularly on farms where cows are kept. The beans should be sown in February or March as advised above at the rate of from 9 to 12 stones per statute acre and the oats sown at from 2 to 3 weeks later at the rate of about 9 stones per statute acre. A strong growing variety of oats, which ripens rather late, such as Victory, Stormont Arrow, Crown, etc., should be chosen for growing with beans. When the beans are sown about a fortnight before the oats the mixed crop will be ripe at the same time.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

OX-WARBLE FLY.—The Ox-Warble Fly Order requires that cattle must be dressed with a suitable derris wash between 15th and 22nd March, and at intervals of 28 days afterwards, until no further warble swellings appear. A list of approved preparations is given in Circular No. 13, copies of which may be had on request. Neglect to destroy the warble maggots at the proper time may lead to a prosecution. All cattle owners are warned that the Ministry intends during the coming season to enforce the provisions of the Order as strictly as in peace time.

POULTRY STATIONS AND ACCREDITED POULTRY FARMS.—Lists giving the names and addresses of owners of hen, duck, goose and turkey stations can be obtained from the County Agricultural Executive Officer or from the local Poultry Instructor. Lists of owners of Accredited Poultry Farms can be obtained from either of these sources or from the Ministry. In each case the list is free. The breeding stock on these farms has been carefully selected and the hens have passed the test for Bacillary White Diarrhoea disease. Those requiring eggs for hatching should obtain them from Accredited Poultry Farms or from County Poultry Stations.

SEED BARLEY AND FLAX.—It is hoped that adequate supplies of seed barley and flax will be available. Supplies will be obtainable through the normal trade channels. Farmers intending to sow barley or flax,—and where possible every farmer should grow at least a small area of each—should place their order for seed with the local seeds merchant as soon as possible. Even if delivery cannot be given immediately it is nevertheless important to place the order early so as to make sure of having supplies in time.

LAND FERTILITY SCHEME.—The Land Fertility Scheme is still in operation. Under the scheme lime for agricultural land may be obtained at half the normal cost provided that not less than 2 tons are purchased and applied and provided the lime is obtained from an approved supplier. Farmers should take advantage of this scheme and apply lime to their land. Lime is of distinct benefit to crops such as turnips, cabbage, kale, and beans; and barley cannot be grown in a soil which is lacking in lime. For further particulars on liming farmers should read the Ministry's leaflet No. 84 "Lime and Liming."

LEAFLETS.—A list of the Ministry's leaflets is given on the last page of this report. Copies of any of these leaflets can be had, free of charge, from

the Ministry. The most recently published of these are Leaflet No. 93 "The Destruction of Rats and Rabbits", Leaflet No. 94 "The Growing and Harvesting of Flax", Leaflet No. 95 "Barley Growing", Leaflet No. 96 "The Prevention of Leaf-Stripe and Smut in Cereals", Leaflet No. 97 "The Growing of Beans for Stock Feeding", and Allotments Leaflet No. 2, "Cropping the Allotment".

NORTH WEST SCHOOL, STRABANE.

The next session at this school will begin on 2nd April, 1940. Useful courses of instruction in poultry-keeping, dairying and housewifery are provided for girls. The session lasts for about eleven weeks. Admission is by scholarship so that the instruction, board and residence are free. The different County Committees of Agriculture provide the Scholarships, and application for a scholarship should be made as soon as possible to the Agricultural Executive Officer or the local Poultry Instructor. There is no qualifying examination for the Scholarships which are awarded in the order in which applications from eligible candidates are received. Copies of the School prospectus and of forms of application for scholarships can be obtained from either of the sources mentioned above, or from the Ministry.

EGG-LAYING TEST AT STORMONT.

The fourth period of four weeks ended on the 20th January, 1940. The average egg production during the 16 weeks the test has been in progress, based on the original flock of 684 birds was 48.10 eggs per bird which is about $1\frac{1}{2}$ eggs per bird less than the average for the similar period in the previous test.

The leading pen in the entire test at the end of the 16 weeks period was a pen of White Wyandottes entered by Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast, the six birds of which had laid 466 scoring eggs. This pen has qualified, subject to fulfilling the other conditions of the test, for the award of the Challenge Cup provided by the Council of the Scientific Poultry Breeders' Association for the pen of birds laying the greatest number of scoring eggs during the first sixteen weeks of the test. Second place was taken by a pen of Rhode Island Reds entered in the Station-holders' Section by Mrs. H. Rea, Lisowen, Listooder, Crossgar, which laid 450 scoring eggs, and third place by the pen of Rhode Island Reds entered by the Marquis of Hamilton, Baronscourt, County Tyrone,—422 scoring eggs. Sixteen birds out of the 684 accepted have died. This is a mortality rate of 2.34 per cent., which is 1.09 per cent. lower than the rate for the corresponding 16 weeks of the previous test.

FOOD PRODUCTION PUBLICITY CAMPAIGN.

With the co-operation of Messrs. Gallaher, York Street, Belfast, the Ministry has arranged a publicity campaign in furtherance of the "Grow more Food" policy occasioned by the war. Messrs. Gallaher have placed their van and loud speaker equipment at the disposal of the Ministry and the van will visit towns and villages throughout Northern Ireland during the months of February and March, the visit to each centre being made on a fair day as far as possible.

It is hoped that this means of getting into personal touch with farmers will be of mutual advantage to the farmers and to the Ministry. The local District Tillage Officer and in some cases the County Executive Officer will be in attendance and will endeavour not only to explain the obligations of farmers under the Compulsory Tillage Order but clear up any difficulties which farmers may have in regard to the working of the Order or on other matters connected with the food production campaign.

The following is the programme of visits :—

<i>Date of visit</i>		<i>Centre</i>
Monday	19th February	... Camlough, County Armagh.
Tuesday	20th "	... Clogher, County Tyrone.
Wednesday	21st "	... Lisnaskea, County Fermanagh.
Thursday	22nd "	... Fintona, County Tyrone
Friday	23rd "	... Carrickmore, County Tyrone
Saturday	24th "	... Newtownhamilton, County Armagh
Monday	26th "	... Banbridge, County Down
Wednesday	28th "	... Saintfield, County Down
Thursday	29th "	... Antrim, County Antrim
Friday	1st March	... Moy, County Tyrone.
Saturday	2nd "	... Cookstown, County Tyrone
Monday	4th "	... Beragh, County Tyrone
Tuesday	5th "	... Omagh, County Tyrone
Wednesday	6th "	... Gortin, County Tyrone
Thursday	7th "	... Strabane, County Tyrone
Friday	8th "	... Irvinestown, County Fermanagh
Monday	11th "	... Enniskillen, County Fermanagh
Tuesday	12th "	... Pomeroy, County Tyrone
Wednesday	13th "	... Stewartstown, County Tyrone
Thursday	14th "	... Larne, County Antrim
Friday	15th "	... Bushmills, County Antrim
Saturday	16th "	... Ballymena, County Antrim
Monday	18th "	... Ballyclare, County Antrim
Tuesday	19th "	... Dundrum, County Down
Wednesday	20th "	... Downpatrick, County Down
Thursday	21st "	... Ballynahinch, County Down
Monday	25th "	... Armoy, County Antrim
Tuesday	26th "	... Maghera, County Derry
Wednesday	27th "	... Kilrea, County Derry
Thursday	28th "	... Antrim, County Antrim

Farmers are asked to make a note of the date on which the van will visit their particular town and to endeavour to be present.

MINISTRY OF LABOUR RETAIL PRICES AND INDICES.

The Ministry of Labour general index of retail prices of food in Great Britain and Northern Ireland, at January 1st, 1940, was 57 per cent. above the level of July, 1914, as compared with 57 per cent. at December 1st, 1939, and 38 per cent. at *December 31st, 1938. There were small increases during the month in the average prices of cheese, butcher's meat and bacon. On the other hand, there were seasonal reductions in the prices of eggs. The average prices of flour, bread, tea, sugar, milk, butter, margarine and potatoes were practically the same at the two dates.

The following table shows the average retail prices of certain foods in large towns and villages, on January 1st, 1940, December 1st, 1939, and December 31st, 1938.

Article	Jan. 1, 1940	Dec. 1, 1939	Dec. 31, 1938	Increase over July, 1914.		
				Jan. 1, 1940	Dec. 1, 1939	Dec. 31, 1938
	per lb. s. d.	per lb. s. d.	per lb. s. d.	per cent.	per cent.	per cent.
Beef, British—						
Ribs	1 3½	1 3	1 2½	56	51	43
Thin Flank	0 8½	0 8½	0 7½	31	25	15
Beef, Chilled or Frozen—						
Ribs	0 10½	0 10½	0 9½	45	43	33
Thin Flank	0 5½	0 5½	0 5	18	15	3
Mutton, British—						
Legs	1 4½	1 4½	1 3½	60	56	45
Breast	0 8½	0 8½	0 7½	30	26	14
Mutton, Frozen—						
Legs	0 11½	0 11	0 10½	63	61	51
Breast	0 4½	0 4½	0 4	15	12	1
Bacon (Streaky)	1 7½	1 7½	1 3	77	72	35
Butter—						
Fresh	1 7	1 6½	1 4½	30	29	14
Salt	1 6½	1 6½	1 3½	32	32	7
Cheese	1 0½	0 11½	0 10½	44	36	25
Milk	Per Qt. 0 7	Per Qt. 0 7	Per Qt. 0 7	99	99	98
Eggs (Fresh)	each 0 2½ Per 4 lb.	each 0 2½ Per 4 lb.	each 0 2 Per 4 lb.	104	128	75
Bread	0 8½ Per 7 lb.	0 8½ Per 7 lb.	0 8½ Per 7 lb.	46	46	47
Flour	1 1½	1 1½	1 2	30	30	31
Potatoes	0 6½	0 6½	0 5½	38	37	18

*As 1st January fell on a Sunday, the statistics relate to 31st December, in accordance with the usual practice.

The cost of maintaining unchanged the pre-Great War standard of living of working-class families at January 1st, was approximately 74 per cent. over the level of July, 1914, as compared with 73 per cent at December 1st, and 55 per cent. at December 31st, 1938.

AGRICULTURAL INDEX NUMBERS.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.

(Corrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1940	1939			1939	1938
	January	December	November	October	January	January
Cattle : Fat ...	*	88	92	92	76	88
Store ...	96	98	95	98	91	93
Cows : Fat ...	*	78	76	82	64	77
Sheep and Lambs :						
Fat ...	*	64	58	69	53	59
Hens and Chickens	69	78	74	70	75	72
Ducks ...	89	92	90	98	93	72
Eggs ...	141	100	103	93	103	92
Milk :						
For Manufacture	*	107	101	97	87	87
Whole ...	132	129	125	120	107	106
All ...	*	119	111	104	99	98
Farmers' Butter ...	90	89	88	87	77	82
Potatoes ...	129	124	98	103	100	66
Oats ...	185	203	126	112	74	97
Hay ...	142	136	127	128	79	78
Oat Straw ...	162	134	123	112	87	88
Flax ...	107	109	108	—	78	76
Grass Seed :						
Perennial ...	162	135	89	102	106	48
Italian ...	225	224	136	127	71	31
All ...	185	162	127	118	101	47

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, and Government Payments for Milk.

Cattle : Fat ...	*	101	105	106	88	100
Milk :						
For Manufacture	*	146	131	122	119	102
All ...	*	137	129	122	112	104

* Not yet available.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.

(Uncorrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1940	1939			1939	1938
	January	December	November	October	January	January
Cattle : Fat ...	*	87	83	82	77	90
Store ...	94	94	92	96	88	91
Cows : Fat ...	*	76	70	76	66	80
Sheep and Lambs : Fat ...	*	58	54	61	51	59
Hens and Chickens	73	83	69	65	79	76
Ducks ...	91	102	88	96	96	75
Eggs ...	146	137	173	135	106	95
Milk :						
For Manufacture	*	121	107	97	100	100
Whole ...	146	146	131	121	121	121
All ...	*	135	117	104	112	112
Farmers' Butter ...	93	93	92	86	80	86
Potatoes ...	135	124	93	101	104	70
Oats ...	175	188	116	100	69	90
Hay ...	138	132	123	124	78	76
Oat Straw ...	165	133	122	110	89	91
Flax ...	113	113	111	—	83	82
Grass Seed :						
Perennial ...	179	144	93	102	116	55
Italian ...	252	223	141	124	82	39
All ...	197	170	131	114	107	52

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, and Government Payments for Milk.

Cattle : Fat ...		99	95	95	90	102
Milk :						
For Manufacture	*	165	139	122	136	117
All ...	*	155	136	121	127	119

* Not yet available.

PRICES USED IN THE CALCULATION OF THE INDEX NUMBERS.

Commodity	1927-29	1940	1939			1939	1938
		January	December	November	October	January	January
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cattle :							
Fat, per live cwt.	45 2	*	39 4	37 5	37 3	34 11	40 9
Store, per head	223 7	209 7	210 1	204 6	214 1	197 6	203 10
Cows :							
Fat, per head	336 10	*	255 9	237 0	256 3	223 7	269 11
Sheep & Lambs:							
Fat, per head	53 6	*	31 1	28 8	32 5	27 5	31 4
Hens & Chickens:							
per head	3 0½	2 2½	2 6½	2 1½	1 11½	2 4½	2 4
Ducks, per head	2 6½	2 3½	2 7½	2 3	2 5½	2 5½	1 10½
Eggs, per 120	13 6	19 9	18 6	23 3	18 2	14 3	12 9
Milk:							
For Manufacture, per gal.	0 6½	*	0 7½	0 6½	0 6	0 6½	0 6½
Whole, per gal.	1 0	1 5½	1 5½	1 3½	1 2½	1 2½	1 2½
Farmers' Butter, per lb.	1 5½	1 4½	1 4½	1 4	1 3	1 2	1 3
Potatoes, per cwt.	3 5	4 7	4 2	3 2	3 5	3 6	2 4
Oats, per cwt.	8 1	14 2	15 2	9 5	8 1	5 7	7 4
Hay, per ton	73 8	101 8	97 1	90 6	91 1	57 2	55 10
Oat Straw: per ton	47 6	78 4	63 3	57 9	52 3	42 2	43 3
Flax, per stone	12 3	13 9	13 10	13 7	—	10 2	10 0
Grass Seed:							
Perennial, per cwt.	16 9	29 10	24 2	15 7	17 1	19 5	9 2
Italian, per cwt.	22 7	57 0	50 4	31 9	28 0	18 7	8 9

* Not yet available.

THE FEEDING STUFFS POSITION.

Farmers will be relieved to learn that supplies of imported feeding stuffs are likely to be more plentiful during the next two or three months, and that as far as can be foreseen about two-thirds of normal pre-war quantities will be available. In view of the improved position the Ministry has issued revised instructions to provender millers and merchants who manufacture compound rations. The new licences enable manufacturers to prepare a dairy mixture, a mixture suitable for pigs and poultry and a chick rearing mixture. The quantity of mixtures prepared by the holder of a licence must not exceed one-third of the total sales of feeding stuffs effected by him in the preceding week and a high proportion of all feeding stuffs will be available to farmers in the form of "straight" meals.

The prices of nearly all individual feeding stuffs are specified in the Feeding Stuff (Maximum Prices) Order, 1940. Farmers, however, should bear in mind that additions to the scheduled prices may be made for (a) transport, (b) warehousing by distributing dealers, (c) sales in small lots, (d) credit.

The following are examples of the maximum prices which may be charged under the Feeding Stuff (Maximum Prices) Order, 1940:—

				per ton (sacks included)		
				£	s.	d.
Maize Meal (home milled) ...	...	...	...	9	12	6
Maize, cooked, flaked ...	...	...	...	10	10	0
Barley Meal (manufactured from imported barley) ...	...	...	...	9	15	0
Pollard, Bran, Middlings, imported, white, Australian ...	...	...	...	8	5	0
Straight run Bran from white wheat, home milled ...	...	...	...	8	5	0
Pollard, Bran and Middlings imported from countries other than Australia ...	...	...	...	7	2	6

The above prices are for one ton lots net cash ex. mill or store.

The seller of any feeding stuff, if requested in writing by the purchaser, must furnish full particulars of any additional charges permitted by the Order.

The method to be used in arriving at the price of mixtures is also set out in the Maximum Prices Order. There is, however, no standard price for mixtures as the charge will vary with the cost of the individual ingredients of the ration. It is expected, however, that the revised licences issued to manufacturers will effect a substantial reduction in the price of mixtures as manufacturers are now precluded from using the more expensive ingredients such as home-grown barley in the preparation of these mixtures.

If farmers are in doubt as to whether they are being overcharged they should forward invoices of their purchases to the Ministry for investigation.

FERTILISER PRICES.

The following are the prices to farmers for phosphatic and compound fertilisers for February, 1940. They are based on the basic prices obtaining in the four months ended 30th June, 1939, together with the additions allowed by Direction 2 of the Control of Fertilisers (No. 1) Order, 1939, issued under the Defence Regulations, 1939. These prices are for six ton lots ex. Belfast or Londonderry, and do not include freight charges which, of course, will vary from district to district. The prices of these manures are subject to a discount of 5 per cent. for cash with order. Where delivery is made ex. merchant's store a reasonable extra amount is chargeable to cover costs of cartage and handling expenses.

				Per ton gross			} Ministry of Agriculture Formulae 1940
				£	s.	d.	
Superphosphate, 16% S.P.A.	...	...	...	4	15	0	
Potassic super, 11% S.P.A., 2% K ₂ O	...	...	...	5	0	0	
Mangel manure, 8% S.P.A., 5% nitrogen, 3.5% K ₂ O	...	...	...	6	15	9	
Root manure, 11% S.P.A., 3.75% nitrogen, 2.75% soluble K ₂ O	...	...	...	6	15	3	
Oat and Barley manure, 9% S.P.A., 6% nitrogen, 4% K ₂ O	...	...	...	7	6	9	
Potato manure, 11% S.P.A., 3.5% nitrogen, 6% K ₂ O	...	...	...	7	5	3	
Sensol, 5% soluble and 15.5% insoluble phosphoric acid	...	...	...	4	3	9	
Ground North African Phosphate 26% phosphoric acid	...	...	...	3	16	3	

The price of sulphate of ammonia in six ton lots ex. Belfast or Londonderry is £8 15s. per ton. An additional charge of 1/6d. per ton will be made after 1st March. Extra charges for small lots :—Two tons and over, but less than six tons, 5/- per ton; one ton and over, but less than two tons, 10/- per ton; two cwts. and over, but less than one ton, 1/- per cwt.

The price of concentrated complete fertiliser No. 5 is £13 4s. 6d. per ton for 2 ton lots ex. Belfast or Londonderry, and the corresponding price for Nitro-chalk is £8 12s. 6d.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

Auction sales of fat cattle were held during the first two weeks of last month and with the introduction of the Meat Control Scheme on the 15th January, fat stock were bought by the Ministry on behalf of the Ministry of Food at the prices fixed under the Scheme.

At the first of the auction sales held this year the quality of the offerings was uniformly good and with business brisk prices recorded appreciable advances. In the following week, however, trading conditions were rather

unsettled early in the sales although a firmer tendency developed and prices hardened further. The all-over average price for that week, however, was a shade lower than that previously recorded. The general ranges of prices for the two sales were: top quality and super-grade animals, 48/- to 51/6d.; good commercial cattle, 46/- to 48/6d. and rougher and unfinished beasts, 43/- to 47/- per live cwt. The average prices of fat cattle per live cwt. were 45/10d. for the week ended the 9th January and 45/6d. for that ended on the 16th ultimo, as compared with 35/8d. and 36/7d. respectively for the corresponding dates last year. The prices under the Meat Control Scheme as from 15th ult. are shown on page 606. The top price of 64/6d. per live cwt. was obtained for some cattle of exceptional quality.

The demand for store cattle at the sales last month opened quiet but with better quality animals coming forward in the middle of the month trade brightened and prices firmed. Towards the end of January, however, transport difficulties resulting from the very severe weather conditions in Great Britain, had a dulling effect on the store trade and prices eased to previous levels. The following were the general ranges of quotations throughout the month: large forward stores, £13 15s. to £18; six-quarter-olds, £10 to £14 5s.; yearlings, £9 to £12; and calves, £6 to £10 10s. per head.

Dairy cattle continued in brisk request during the earlier part of last month and with shippers and dealers well represented good clearances were effected at previous satisfactory rates. Towards the middle of the month there was some falling off in the demand and only choice animals changed hands readily at firm rates. At the sales held during the last week of January shippers were less active and trade was slower at cheaper quotations. The general run of prices at the January sales was: top grade cows, £25 to £34 per head; good useful animals, £20 to £27; and aged and rougher sorts, £16 to £22.

At the two sales of fat sheep and lambs held prior to the introduction of the Control Scheme local butchers were very active buyers and business was brisk at firm to dearer rates. The estimated prices per lb. dressed carcase weight ranged from 9d. to 10¾d. for lambs and from 5¼d. to 7½d. for ewes. Since 15th ultimo fat sheep and lambs have been purchased by the Ministry at the fixed prices shown on page 607.

The weekly ranges of prices of fat cows, store cattle, dairy cattle and fat sheep and lambs are shown in the table on the next page.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description		Week ended 6-1-40	Week ended 13-1-40	Week ended 20-1-40	Week ended 27-1-40	Week ended 3-2-40
Fat Cows ...	...	£19 to £28 £11 to £19	£18 to £24 £13 to £18	Purchased at fixed rates under the Livestock and Meat Control Scheme.		
Store Cattle :						
Large Forward Stores ...	Range of 1st quality 2nd "	£14-10 to £16-15 £12-10 to £14	£16 to £18-10 £14 to £15-10	£16 to £18 £13-10 to £15	£14 to £16 £11 to £13	£13 to £14-10 £11 to £12
Younger Stores ...	Range of 1st quality 2nd "	£10-10 to £12 £7-10 to £10	£11 to £13 £8 to £10	£10-10 to £12 £6-5 to £10	£9 to £10-10 £6-5 to £8-10	£8 to £10 £5-2-6 to £7-5
Dairy Cattle :						
Milch Cows ...	Range of 1st quality 2nd "	£24 to £34 £20 to £23	£25 to £34 £20 to £23	£25 to £34 £18 to £22	£23 to £30 £16 to £20	£22 to £29-10 £12 to £19
Springers ...	Range of 1st quality 2nd "	£23 to £28 £19 to £22	£24 to £27 £20 to £23	£24 to £30-10 £20 to £23	£22-10 to £27 £17 to £20	£20 to £23-10 £13 to £17
Sheep and Lambs :						
Crossbred and White Ewes	Range of 1st quality 2nd "	34/- to 50/- 26/- to 37/6	35/- to 44/- 30/- to 35/-			
Blackface Ewes ...	" 1st "	25/- to 35/-	26/- to 35/-			
Crossbred & White Lambs	" 2nd "	20/- to 27/6	18/- to 30/-	Purchased at fixed rates under the Livestock and Meat Control Scheme.		
Blackface Lambs ...	" 1st "	42/- to 56/-	44/- to 60/-			
	" 2nd "	30/- to 43/-	32/- to 45/-			
	" 1st "	20/- to 28/-	20/- to 28/-			
	" 2nd "	12/- to 19/-	12/- to 22/6			
Rams ...	" 1st "	40/- to 60/-	45/- to 64/-			
	" 2nd "	35/- to 51/-	36/- to 47/-			

TRADE AND PRICES OF LIVE STOCK AT FAIRS.

The offerings of the usual crossbred types of store cattle last month were of fairly high quality but many of the animals were lacking condition on account of the severe weather conditions. The demand continued quiet and while strong cattle for outlying, good large cattle and six-quarter-olds of the Aberdeen Angus type in forward condition for early finishing, and well coloured heifers for breeding purposes found buyers without much trouble, other sorts were very difficult to cash. Prior to the inception of the Livestock and Meat Control Scheme on 15th January prices reflected the rising trend of beef prices and since that date they have been fairly steady at the level then prevailing.

Dairy cattle were in moderately good request throughout January and high-class young springing and milch cows suitable for the shipping trade were particularly in demand. Good clearances were generally effected but prices were altered moved in buyers' favour.

The supplies of fat cattle at fair centres last month were of a fairly high standard of quality and during the first fortnight trade at most centres was keen. Price movements exhibited an upward tendency until the 15th January when the Livestock and Meat Control Scheme came into force and the Ministry, acting on behalf of the Ministry of Food, bought all fat cattle at the fixed rates set out on page 606 of this Report.

Fat sheep were also bought at fixed prices after the middle of the month. The rates for the various types are given on page 607. Previously good fat lambs and hoggets sold readily at fairs at rising prices.

The demand for young pigs was very dull but some slight improvement was observed towards the close of the month. Quotations generally were further reduced. Brood sows were in poor request and only a few sales were effected at cheaper rates of from £6 to £9 per head.

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of January, 1940.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Sheep (over 2 years old)	Young Pigs
					Cows	Heifers			
2	Omagh	Per head £ s.	Per cwt. Live weight	Per cwt. Live weight	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
3	Londonderry	6 10	41/- to 43/-	44/6	16 10	16 0	17 0	12 0	1 10
3	Rathfriland	—	36/- to 41/6	45/6	20 0	17 0	—	—	0 15
4	Ballymoney	7 2/6	40/- to 44/-	45/-	19 15	18 10	19 0	*1 17/6	1 3/6
4	Strabane	7 15	36/- to 41/-	—	25 10	24 0	22 10	—	—
5	Moy	5 5	40/- to 41/-	45/-	17 0	—	17 0	—	—
8	Irvinestown	7 0	37/- to 40/-	48/-	21 7/6	18 0	20 5	*1 15	—
10	Crossgar	—	35/- to 37/6	44/-	15 10	15 0	—	—	1 10
10	Enniskillen	—	38/- to 41/-	—	22 0	—	—	—	1 7
10	Kilrea	6 9	34/- to 41/-	43/-	20 0	18 0	17 0	—	1 10
12	Ballygawley	5 13/9	37/- to 44/-	45/6	18 0	16 10	—	*1 16	0 17/6
12	Banbridge	—	28/- to 42/6	45/6	16 10	—	15 15	—	1 10
15	Camlough	8 8/6	45/- to 48/-	45/-	25 0	—	17 0	—	—
16	Claudy	—	38/- to 42/-	Purchased at	—	—	16 10	Purchased at	—
17	Lisnaskea	6 17/9	38/- to 42/6	fixed rates	18 10	17 0	—	fixed rates	1 0
18	Ballynahinch	—	33/- to 36/-	under	16 0	15 0	15 0	under	1 8
20	Portadown	6 18	40/- to 43/-	the	21 0	17 15	20 0	the	1 5
22	Fintrona	7 15	36/- to 38/-	Livestock	24 0	20 0	22 0	Livestock	1 17/6
22	Moneymore	—	44/- to 45/-	and	16 10	16 10	16 0	and	1 6
25	Antrim	—	39/6 to 42/6	Meat	18 10	—	18 10	Meat	0 18/9
26	Castlederg	5 0	38/- to 42/-	Control	22 5	—	—	Control	1 2
26	Killylea	—	37/- to 39/-	Scheme.	17 0	—	18 0	Scheme.	—
27	Ballymena	6 15/6	31/- to 43/6	—	20 0	—	23 10	—	1 5
			32/- to 43/-	—	24 10	22 0			

* Long Wools. † Downs and Crossbreeds.

MINISTRY OF AGRICULTURE.

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- Prospectus of Ulster Dairy School.
- Prospectus of North West School.
- Prospectus of Greenmount Agricultural and Horticultural College.

Leaflet

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- No. 54 The Breeding and Rearing of Calves.
- " 5 The Dishorning of Calves.
- " 19 How to Feed Linseed.
- " 48 The Fattening of Cattle.
- " 61 The Care and Management of Bulls.
- " 82 White Scour in Calves.
- " 70 Ringworm.
- " 80 Hoose or Husk in Farm Stock.
- " 91 Parasitic Worm Diseases of Farm Stock and Poultry.
- " 92 " Redwater " in Cattle.
- " 13 Contagious Abortion in Cattle.
- " 41 Blackleg, Blackquarter or Quarterill.
- " 64 The Destruction of Warble Fly Maggots in Cattle.

Circular

- No. 5 Why Pay a Tax on the Horns of Cattle ?
- " 13 The Ox-Warble Fly.
- Guide to the Live Stock Breeding Act (Northern Ireland), 1922.

Leaflet

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- " 42 The Purchase of Balanced Rations for Dairy Cows.
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- " 39 The Production of Clean Milk.
- " 81 The Construction of Cow Houses.
- " 78 Graded Milk.
- " 77 Licensing of Milk Producers and Distributors.
- " 51 Butter-making on the Farm.
- " 14 Cheese-making on the Farm.

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- " 2 Improvement of Farm Poultry.
- " 3 Feeding for Egg Production.
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- " 29 The Selection and Breeding of Laying Hens.
- " 46 Hints for Winter Egg Production.
- " 57 How to have Eggs of First Quality.
- " 27 How to Keep Eggs Clean.

Talk to

Producers

- No. 39 Hints on the care and handling of Eggs for Market.

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- " 43 Tuberculosis in Poultry.
- " 32 Roup of Poultry (Fowl Pox).
- " 91 Parasitic Worm Disease of Farm Stock and Poultry.
- " 18 Marketing of Dead Poultry.
- " 37 The Raising and Fattening of Turkeys.
- Report on Stormont Egg Laying Test.
- List of Accredited Poultry Farms in Northern Ireland.

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- " 35 The Fattening of Pigs.
- " 75 Pig Production and The Pigs Marketing Scheme.

Talk to

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- " 63 Sheep—Castration, Docking, Foot-Rot and Care of Feet.
- " 23 The Handling and Care of Wool.
- " 24 Fluke in Sheep.
- " 25 The Rearing and Management of Young Horses.

Register of Premium Stallions in Northern Ireland.

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Lists of Growers of Certified Crops of Potatoes.

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- " 86 Manures and The Manuring of Farm Crops.
- " 7 Potato-growing Trials.
- " 73 The Propagation and Maintenance of Healthy Stocks of Potatoes.
- " 87 The Production of Potatoes for Seed.
- " 50 Potato Blight.
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- " 11 Fruit Tree Pests—Aphides and Apple Sucker.
- " 12 Fruit Tree Pests—Caterpillars.
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- " 65 The Packing of Apples in Barrels.
- " 49 American Gooseberry Mildew.
- " 68 The Cultivation of Strawberries.
- " 71 The Cultivation of Raspberries.
- " 88 Tomato Growing.
- " 67 The Cultivation of Vegetables.
- " 89 Some Pests and Diseases of Vegetable Crops.
- " 17 Home Bottling of Fruits and Vegetables.
- " 76 Acarine (Isle of Wight) Disease of Bees.
- Guide to the Marketing of Fruit Act.
- Allotments—Preparation of Ground.

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- " 85 The Growing of Trees.

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- " 10 Purchase of Fertilisers and Feeding Stuffs.

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- No. 58 How the Fertilisers and Feeding Stuffs Act benefits the Farmer.
- " 66 Seed Testing Facilities of Traders.
- " 26 Ordnance Survey Maps for Farmers.

